



Meander Valley Council
Working Together

PLANNING NOTICE

An application has been received for a Permit under s.57 of the Land Use Planning Approvals Act 1993:

APPLICANT:	Engineering Plus - PA\26\0147
PROPERTY ADDRESS:	87 King Street WESTBURY (CT: 10107/1)
DEVELOPMENT:	Residential outbuildings (patio, shed x2, carport x2) & associated water tanks (x7) - setbacks, driveway, number of accesses, waterway.

The application can be inspected until **Tuesday, 27 January 2026**, at www.meander.tas.gov.au or at the Council Office, 26 Lyall Street, Westbury (during normal office hours).

Written representations may be made during this time addressed to the General Manager, PO Box 102, Westbury 7303, or by email to planning@mvc.tas.gov.au. Please include a contact phone number. Please note any representations lodged will be available for public viewing.

If you have any questions about this application please do not hesitate to contact Council's Planning Department on 6393 5320.

Dated at Westbury on 10 January 2026.

Craig Davies
ACTING GENERAL MANAGER

APPLICATION FORM

PLANNING PERMIT

Land Use Planning and Approvals Act 1993



- Application form & details **MUST** be completed **IN FULL**.
- Incomplete forms will not be accepted and may delay processing and issue of any Permits.

OFFICE USE ONLY

Property No:	<input type="text"/>	Assessment No:	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
DA\	<input type="text"/>	PA\	<input type="text"/>	PC\	<input type="text"/>		

- Is your application the result of an illegal building work? Yes No Indicate by ✓ box
- Have you already received a Planning Review for this proposal? Yes No
- Is a new vehicle access or crossover required? Yes No

PROPERTY DETAILS:

Address:	<input type="text" value="87 King St"/>	Certificate of Title:	<input type="text" value="10107/1"/>
Suburb:	<input type="text" value="Westbury Tas"/>	<input type="text" value="7303"/>	Lot No: <input type="text" value="1"/>
Land area:	<input type="text" value="6464"/>	<i>m² / ha</i>	
Present use of land/building:	<input type="text" value="Residential"/>	<i>(vacant, residential, rural, industrial, commercial or forestry)</i>	

- Does the application involve Crown Land or Private access via a Crown Access Licence: Yes No
- Heritage Listed Property: Yes No

DETAILS OF USE OR DEVELOPMENT:

Indicate by ✓ box	<input type="checkbox"/> Building work	<input type="checkbox"/> Change of use	<input type="checkbox"/> Subdivision	<input type="checkbox"/> Demolition
	<input type="checkbox"/> Forestry	<input type="checkbox"/> Other		
Total cost of development (inclusive of GST):	<input type="text" value="\$ 150,000"/>	<i>Includes total cost of building work, landscaping, road works and infrastructure</i>		
Description of work:	<input type="text" value="Proposed sheds & caports & patio"/>			
Use of building:	<input type="text" value="Storage, garage & patio"/>	<i>(main use of proposed building – dwelling, garage, farm building, factory, office, shop)</i>		
New floor area:	<input type="text" value="283"/> m ²	New building height:	<input type="text"/>	4.305m; 3.705m; 3.141m; 3.920m; 3.705m
Materials:	External walls:	<input type="text" value="colorbond"/>	Colour:	<input type="text" value="monument"/>
	Roof cladding:	<input type="text" value="colorbond"/>	Colour:	<input type="text" value="monument"/>

SEARCH OF TORRENS TITLE

VOLUME 10107	FOLIO 1
EDITION 3	DATE OF ISSUE 01-Nov-2025

SEARCH DATE : 05-Nov-2025
 SEARCH TIME : 04.58 PM

DESCRIPTION OF LAND

Town of WESTBURY
 Lot 1 on Sealed Plan 10107
 Derivation : Part of Lot 1 Section E 1 Gtd to C McFall and
 Part of Lot 2 E 1 Gtd to A Douglas
 Prior CT 3646/17

SCHEDULE 1

N287120 TRANSFER to TRAVIS JAMES GRAY and DIANNE LOUISE
 MUNSON Registered 01-Nov-2025 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 SP 10107 FENCING COVENANT in Schedule of Easements
 E431378 MORTGAGE to Beyond Bank Australia Limited Registered
 01-Nov-2025 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

DRAWING SCHEDULE

A00 COVER PAGE
A01 SITE PLAN

PROJECT INFORMATION

BUILDING DESIGNER:	GRANT JAMES PFEIFFER
ACCREDITATION NO:	CC2211T
ZONE:	10.0 LOW DENSITY RESIDENTIAL ZONE
BUILDING CLASS:	CLASS 10A
LAND TITLE REFERENCE NUMBER:	10107/1
DESIGN WIND SPEED:	ASSUMED 'N3'
SOIL CLASSIFICATION:	ASSUMED 'H1'
CLIMATE ZONE:	7
BUSHFIRE-PRONE BAL RATING:	TBA
ALPINE AREA:	N/A
CORROSION ENVIRONMENT:	LOW
FLOODING:	NO
LANDSLIP:	LOW
DISPERSIVE SOILS:	UNKNOWN
SALINE SOILS:	UNKNOWN
SAND DUNES:	NO
MINE SUBSIDENCE:	NO
LANDFILL:	NO
GROUND LEVELS:	REFER PLAN
ORG LEVEL:	75MM ABOVE GROUND LEVEL

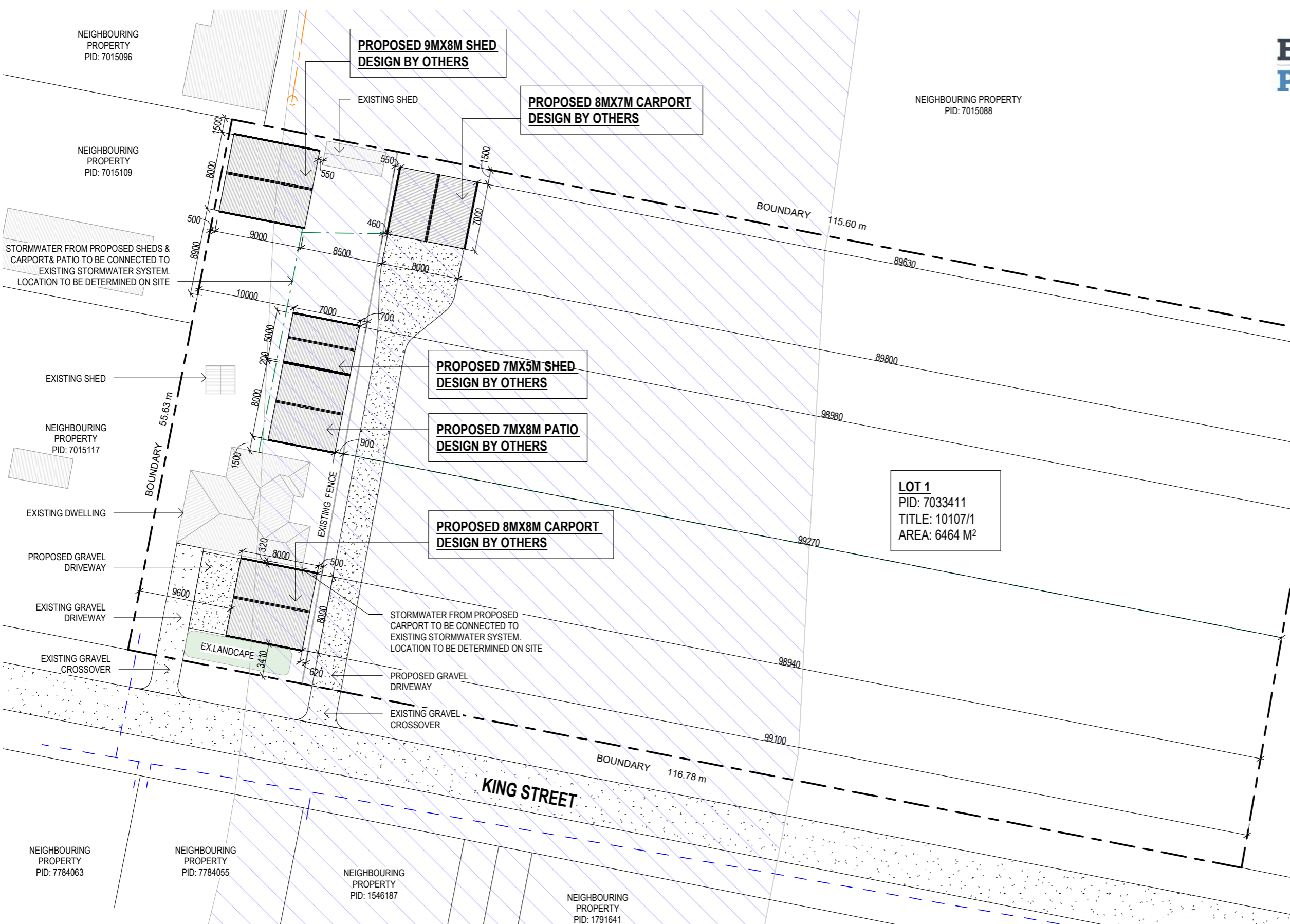
PROPOSED SHEDS & CARPORTS & PATIO

TRAVIS JAMES GRAY
& DIANNE LOUISE MUNSON
87 KING ST
WESTBURY TAS 7303

MEANDER VALLEY COUNCIL

DEVELOPMENT AREA	
Name	Area
EXISTING DWELLING	119.85 m ²
EXISTING SHED	8.70 m ²
EXISTING SHED	15.45 m ²
PROPOSED 7MX5M SHED	35.00 m ²
PROPOSED 7MX8M PATIO	56.00 m ²
PROPOSED 8MX7M CARPORT	56.00 m ²
PROPOSED 8MX8M CARPORT	64.00 m ²
PROPOSED 9MX8M SHED	72.00 m ²
	427.00 m ²

ISSUED FOR DEVELOPMENT APPROVAL



PLANNING APPROVAL

Copyright ©

Client: T.GRAY & D. MUNSON
 Project: PROPOSED SHEDS & CARPORTS
 Address: 87 KING ST
 WESTBURY TAS 7303

Office: 6331 7021
 info@engineeringplus.com.au



DRAINAGE
 ALL DRAINAGE WORK SHOWN IS PROVISIONAL ONLY AND IS SUBJECT TO AMENDMENT TO COMPLY WITH THE REQUIREMENTS OF THE LOCAL AUTHORITIES. ALL WORK IS TO COMPLY WITH THE REQUIREMENTS OF NATIONAL PLUMBING AND DRAINAGE CODE AS3500 AND MUST BE CARRIED OUT BY A LICENCED TRADESMAN ONLY.

NOTE
 STORMWATER FROM PROPOSED SHEDS & CARPORTS TO BE DIRECTED INTO EXISTING STORMWATER SYSTEM TO LOCAL COUNCIL REQUIREMENTS & AS3500

LEGEND	
	SEWER
	WATER
	STORMWATER
	WATERWAY AND COASTAL PROTECTION AREA

SITE PLAN
 SCALE 1:400

A	ISSUED DEVELOPMENT APPROVAL	20.11.25	J.N
-	ISSUED FOR REVIEW	17.11.25	J.N
Rev:	Amendment:	Date:	Int:

Date Drawn: 10.11.25
 Drawn: J. Nguyen
 Checked: J. Pfeiffer
 Approved: J. Pfeiffer
 Scale: As Shown @ A3

Accredited Building Designer
 Designer Name: J. Pfeiffer
 Accreditation No: CC2211T

Drawing No: EP-2025-341 A01 / A01
 Rev: A

To Whom It May Concern,

We write in relation to our application and wish to provide the following clarifications for the Council's consideration:

1. All dwellings on the property will be used strictly for private storage and hobby-related activities. They will not be used for any business, commercial, or income-generating purposes.
2. We will install a minimum of three (3) rainwater tanks once the sheds and carports have been erected. Though, we would like the approval to cover an additional two (2) for future plans, any overflow from these rainwater tanks will be directed into the existing stormwater trench on the property.
3. In regard to the carport at the front of the property, this will be 3m high at the gutter and the hedge at the front of the property is approximately at the same height. As discussed over the phone, the hedge will remain and if replaced, will be replaced strategically to ensure the integrity of a vegetational screen remains for privacy and to uphold the streetscape of King Street. We confirm that we have no objection to maintaining the hedge along the front boundary to a height determined by Council, ensuring the streetscape remains neat and visually appealing.

We acknowledge that access to the rear of the property will be restricted should approval be declined for the structure to be located on the southern side of the dwelling. If the structure goes on the eastern side of the dwelling this hinders access for us personally and the council if works need to be carried out on the stormwater ditch or at the rear of the property.

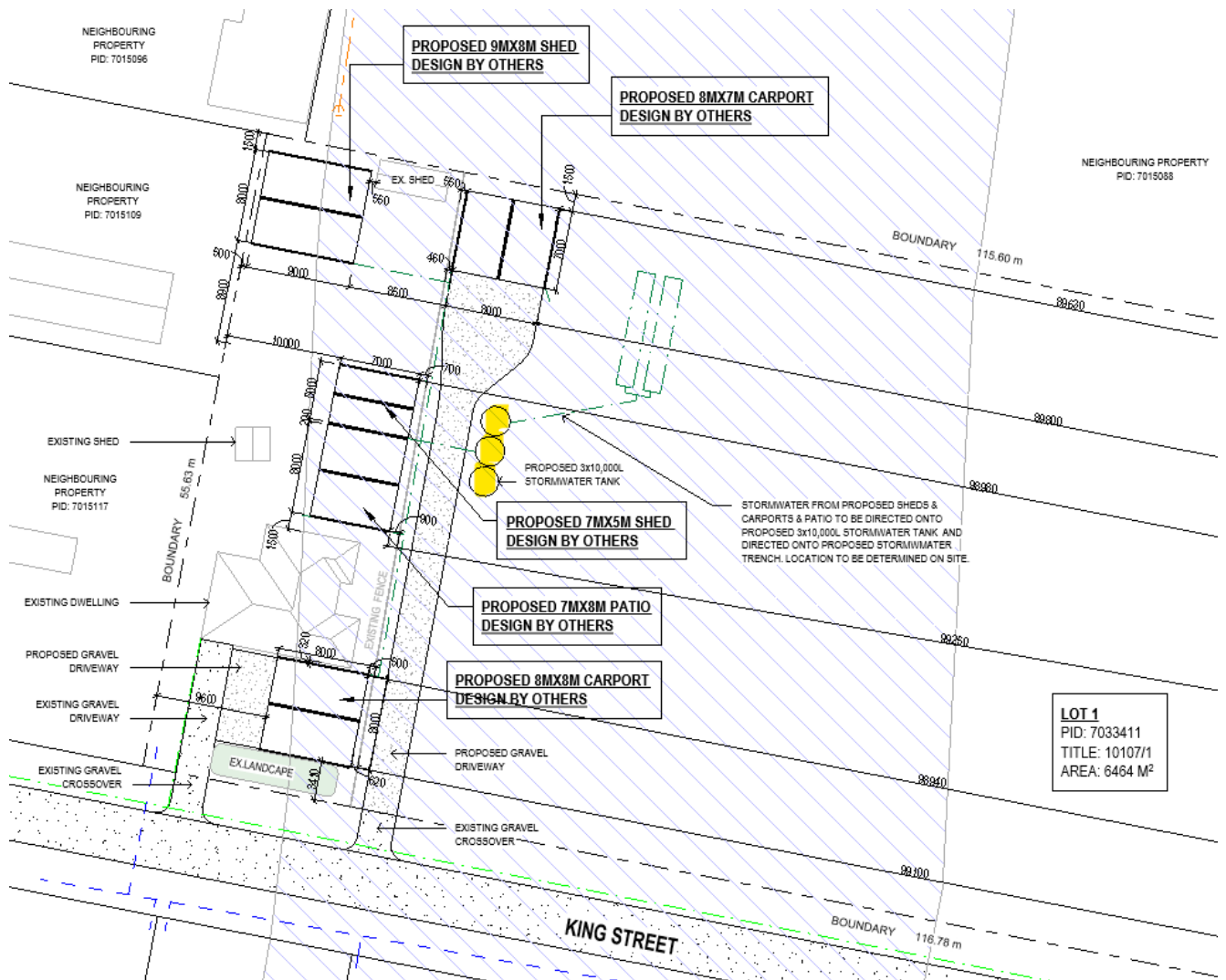
Please see below for a screenshot of the location of the water tanks. The first image is from Jenny at Engineering Plus, indicating the original proposed locations. This has been corrected but I'm not sure if you received that. As per our conversation with Brenton, I have indicated on the second image where all tanks will be located. The two blue tanks will be retention tanks, which will be pumped to the orange tanks on the north side of the property. The two orange tanks either side of the tree are future tanks, after the initial stormwater system is connected, we will look at installing these two tanks for irrigation. The red tank on the south side of the property will be for CFS use.

The two rear tanks on the west side of the ditch will be approximately 34,000L, the two tanks on either side of the tree will be 20,000-30,000L and the CFS tank will be approximately 10,000-15,000L. These volumes will be dependent on Tank Tec's advice after we provide them with the measurements of the space available (they provide custom-made tanks).

We trust the above addresses Council's considerations, and we appreciate your time and assessment of our application.

Yours sincerely,

Travis Gray



NORTH



SOUTH

Brenton Josey

From: Travis Gray <TravisGray33@hotmail.com>
Sent: Wednesday, 7 January 2026 7:15 AM
To: Planning - Meander Valley Council
Cc: Brenton Josey
Subject: Re: PA\26\0147 - Follow-up questions - 87 King Street Westbury

Hello Brenton,

Please see answers below.

In point 2 you refer to 3 initial tanks and then 2 additional tanks. The plan in the figure 2 is showing 7 tanks (2 blue, 4 orange, 1 red). Am I correct in thinking the two blue tanks, two orange tanks and the red tank will be installed initially, for a total of 5 initial tanks?

- *Yes that is correct*

What is the size of the blue tanks? One blue tank appears to be in the footprint of the carport at the front of the dwelling. Is the tank going under the carport?

- *The blue tanks will be between 1000L and 3000L. We will get advice from Tank Tec once the carport has been erected*
- *Sorry, my screen shot isn't to scale - it's a rough indication of where the tanks will go. The tanks won't be under the carport. As it's a freestanding carport, it will either go at the end of the carport or adjacent to the house on a small stand*

One last note, no updated plan as shown in figure 1 was ever received.

- *Do you need to have a professional plan in order to advertise? Engineering Plus aren't back from the Christmas break until next week. We are keen to keep progressing with the application so as not to be in a rush to connect stormwater, other trades, etc heading into winter. If a plan is the only thing holding us up from proceeding, is it possible the application could be progressed, with the plan to follow next week?*

Kind regards

Travis Gray

From: Planning - Meander Valley Council
Sent: Tuesday, January 6, 2026 4:26 PM
To: Travis Gray
Cc: Brenton Josey
Subject: PA\26\0147 - Follow-up questions - 87 King Street Westbury

Hello Travis,

Thank you for sending through the additional information following on from our phone call last year. Just a couple of follow-up questions.

STRUCTURAL GENERAL NOTES

1.0 General

- 1.1 These drawings are
 - a) Jointly owned by Steeline and Venn Engineering Pty Ltd
 - b) Provided for the sole purpose of obtaining building approval and guiding construction of a single building at the job address shown in the title block
 - c) Prohibited to be used for any other purpose without written authorisation from Steeline and Venn Engineering Pty Ltd.
 - d) Only valid if signed by the engineer and must not be altered in any way without signed approval from the engineer.
 - e) Produced to scale but dimensions shall not be obtained by measuring the drawings. All dimensions are in millimeters unless stated otherwise.
- 1.2 The engineer accepts no liability or responsibility for the contents of drawings that are invalid.
- 1.3 The word 'the engineer' used in these notes refers to an employee or nominated representative of Venn Engineering Pty Ltd.
- 1.4 The engineer is not the project manager or site supervisor for this project. It is the responsibility of the project manager or site supervisor in charge to ensure that the non-structural requirements of the Governing Building Code are considered and appropriately designed. This includes, but not limited to, fire & bushfire design, access requirements, future roof access requirements, lighting, glazing and electrical design, etc.

2.0 Structural Design

- 2.1 The structural framing components detailed in these drawings have been designed in accordance with the following documents for the design criteria detailed in these notes

Governing Building Code Loading Standards	2022 National Construction Code – Building Code of Australia Volume 2 and 2022 Housing Provisions Standard AS/NZS 1170.0:2002(+A5) AS/NZS 1170.1:2002(+A2) AS/NZS 1170.2:2021
Cold formed Steel member standard	AS/NZS 4600:2018
- 2.2 These drawings are also the limit of the Structural Design, any requirements for additional structural design of other items included in the project are specifically excluded if not shown on these drawings. This includes, but not limited to, requirements for additional loads that aren't specified including flood design loads, additional roof loads from solar panels, retaining walls required on site, driveway design etc.
- 2.3 These structural drawings and specifications represent the finished structure. The building is not considered complete until the installation of all components and details shown herein are installed according to the drawings.
- 2.4 No alterations are to be made to this structure without written approval of the engineer. This includes, but not limited to, modification to the plans and/or specifications, be the installation of additional openings, increased roof loads, skylight roof sheets or removal of cladding. If changes are made without written approval, such changes shall the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their full responsibility to replace or repair the condition of the building as directed by the engineer.

3.0 Design Criteria

Building class.....	10a
Building Importance level.....	2
Wind region.....	A4
Terrain category.....	2.51
Topographic multiplier.....	1
Shielding multiplier.....	0.85
Ultimate design wind speed.....	33.2 m/s
Snow load.....	0.00 kPa
Slab imposed load.....	2.5 kPa or 9kN applied over 0.3x0.3m area (light vehicles)
Allowable bearing capacity of foundation supporting footings.....	100 kPa
Allowable bearing capacity of foundation supporting slab.....	50 kPa
Allowable skin friction of foundation.....	25 kPa
Soil Type.....	Non-aggressive (not saline or acid sulfate)

4.0 Installation Building Contractor Responsibilities

- 4.1 The contractor shall verify and confirm all site conditions and dimensions. Any discrepancies between drawings and site conditions shall be referred to the engineer for decision before proceeding with the work.
- 4.2 All workmanship and materials are to be in accordance with the Governing Building Code including all relevant Australian Standards and local statutory authorities except where varied by the contract documents.
- 4.3 The contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part is overstressed under construction activities. They shall provide all temporary bracing, shoring or other means to avoid excessive stresses and to hold structural elements in place during erection. These temporary provisions shall remain in place until sufficient permanent members are erected to ensure the safety of partially erected structures. The contractor is responsible for meeting all laws regulating the erection of steel buildings including, but not limited to, Safe Work Australia guidelines.
- 4.4 The contractor shall be responsible for the location of all services in the vicinity of the works. Any services shown are provided for information only. The contractor shall confirm the location of all services prior to commencing and shall be responsible for the repair of any damage caused to services, as well as any loss incurred because of the damage to any service.

5.0 Foundation

- 5.1 The bearing capacity of the foundation supporting the footings and slab shall be confirmed before any concrete is placed.
- 5.2 No earth or debris is to fall into the footings or piers before and during placing of concrete.
- 5.3 All footings shall be located centrally under walls and columns unless noted otherwise.
- 5.4 Concrete embedment depths do not apply to locations where any uncompacted fill or disturbed ground exists or where walls of the excavation will not stand without support. Request further advice from the engineer in these circumstances.
- 5.5 Fill used for the support of a slab on ground shall be controlled fill or rolled fill as in accordance with clause 6.4.2 of AS 2870-2011.
- 5.6 Slabs less than 100sq.m in plan area are suitable for AS 2870-2011 site classes A, S & M. For larger slabs or for site classes M-D, H1, H1-D, H2, H2-D, E & E-D, the slab may experience cracking more than is considered normally acceptable. The cracking is considered of aesthetic concern only and should not effect the structural performance of the slab or shed. If this is not desired, contact the engineer for further advice.

6.0 Concrete

- 6.1 Concrete placement and workmanship shall be in accordance with AS 3600-2018 & AS 2870-2011.
- 6.2 Concrete shall be
 - a) N25 with slump of 100 mm in accordance with AS 1379-2007, with 20 mm maximum nominal aggregate size and no admixtures.
 - b) consolidated by mechanical vibration.
 - c) Cured for a minimum of 7 days using continuous ponding with potable water.
- 6.3 No holes, chases or embedment of pipes other than those shown on the drawings shall be made in concrete members without prior approval of the engineer.

7.0 Reinforcement

- 7.1 Reinforcement shall comply with AS/NZ 4671-2019.
- 7.2 Reinforcement is represented diagrammatically and not necessarily shown in true projection.
- 7.3 Welding of reinforcement shall not be permitted without the approval of the engineer.
- 7.4 All reinforcement shall be securely supported in its correct position ensuring the correct cover during placing of concrete by approved bar chairs, spacers or support bars. Approved chairs include stainless steel or plastic bar chairs for bottom reinforcement and plastic tipped wire bar chairs for top reinforcement. All chairs to be spaced at maximum of 750mm centres.
- 7.5 Cover to reinforcement shall be:
 - a) 50mm for surfaces of concrete in contact with the ground;
 - b) 30mm for top surfaces of slabs fully enclosed by the building without open bays or
 - c) 60mm for top surfaces of slabs more than 1 km from the coastline with open bays.
 - d) For buildings with open bays within 1km of the coast, contact the engineer for cover and concrete grade requirements.
- 7.6 Reinforcement shall be lapped 500mm for 12mmØ bars and 800mm for 16mmØ bars.
- 7.7 Mesh reinforcement shall be lapped such that the two outermost wires of one sheet overlap the two outermost wires of the other sheet by 25 mm.
- 7.8 Hooks, bends and cogs to be in accordance with AS 3600-2018 unless noted otherwise on drawings.

8.0 Anchor Bolts

- 8.1 All anchors bolts shall be installed in accordance with the manufacturer's installation instructions.
- 8.2 Drill holes using a percussion drill (coring not permitted) to the correct hole diameter and depth as specified in the drawings.
- 8.3 Thoroughly clean and blow the dust out of the holes using the cleaning accessories prescribed by the manufacturer's instructions.
- 8.4 Substitution of anchors bolts and chemical epoxy adhesive is not permitted unless written confirmation from the engineer is provided.
- 8.5 For chemical anchors, ensure load is not applied to the anchors whilst epoxy adhesive is curing.

9.0 Light Gauge Cold-formed Steel

- 9.1 All light gauge cold-formed steel shall comply with AS 1397-2021 and be the following grades

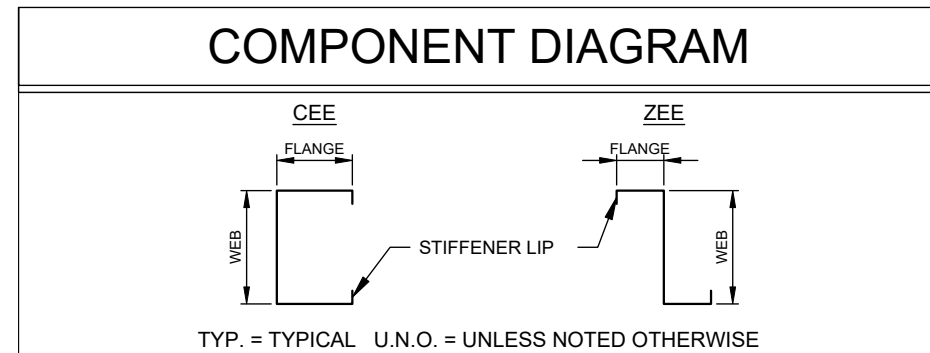
Thickness(mm)	Steel grade (yield stress, MPa)	Protective coating (g/m2)
BMT ≤ 1.0mm	G550	Z350
1.0mm < BMT < 1.5mm	G500	Z350
1.5mm ≤ BMT ≤ 3.0mm	G450	Z350
- 9.2 Welding of light gauge cold-formed steel shall not be permitted.
- 9.3 Column and rafter members shall not be drilled or notched without prior approval of the engineer.
- 9.4 Round holes may be drilled through any girt or purlin member within the middle third of the depth of that member and not within 600mm of member end unless noted otherwise.
- 9.5 All bolts used to connect light gauge cold-formed steel members shall be
 - a) Zinc coated M12 (min.) grade 4.6 snug tightened complying to AS 1111.1-2015 & AS 1112.3-2015 unless noted otherwise.
 - b) Spaced no less than 3 bolt diameters between centres.
 - c) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
- 9.6 All screws used to connect light gauge cold formed steel members (excluding sheeting) shall be
 - a) 10g (min.) self-drilling screws complying with AS 3566.1-2002.
 - b) Corrosion resistance class 4 in accordance with AS 3566.2-2002 for buildings within 1 km from the coastline with open bays or class 3 otherwise.
 - c) Spaced no less than 3 bolt diameters between centres.
 - d) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.

10.0 Roof & Wall Sheeting

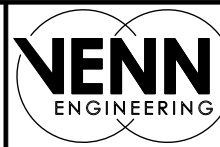
- 10.1 Roof & wall sheeting shall comply with AS 1562.1-2018 and have suitable corrosion protection complying with Table 7.2.2a of the 2022 Housing Provisions Standard.
- 10.2 During construction and maintenance, no foot traffic shall occur within end spans of sheeting, foot traffic shall occur
 - a) Evenly across at least two ribs for corrugated profiled sheeting or
 - b) In the pans for pan-type profiled sheeting.
- 10.3 Any roof skylights shall be approved by the engineer
- 10.4 Safety mesh shall be installed in accordance with the building code

11.0 Door & Window Components

- 11.1 Wind-locked roller doors are assumed to remain in-place and resist the ultimate limit state wind loading except for in cyclonic regions
- 11.2 Non-wind-locked roller doors are assumed to have failed at the ultimate limit state wind loading
- 11.3 Personal access doors shall be rated for the wind loading parameters stated in the design criteria (see section 3.0)
- 11.4 All windows shall be in accordance with AS 1288-2021 & AS 2047-2014(+A2) as appropriate for the wind loading parameters stated in the design criteria (see section 3.0)



REV	DATE	DESCRIPTION
A	17-11-2025	-

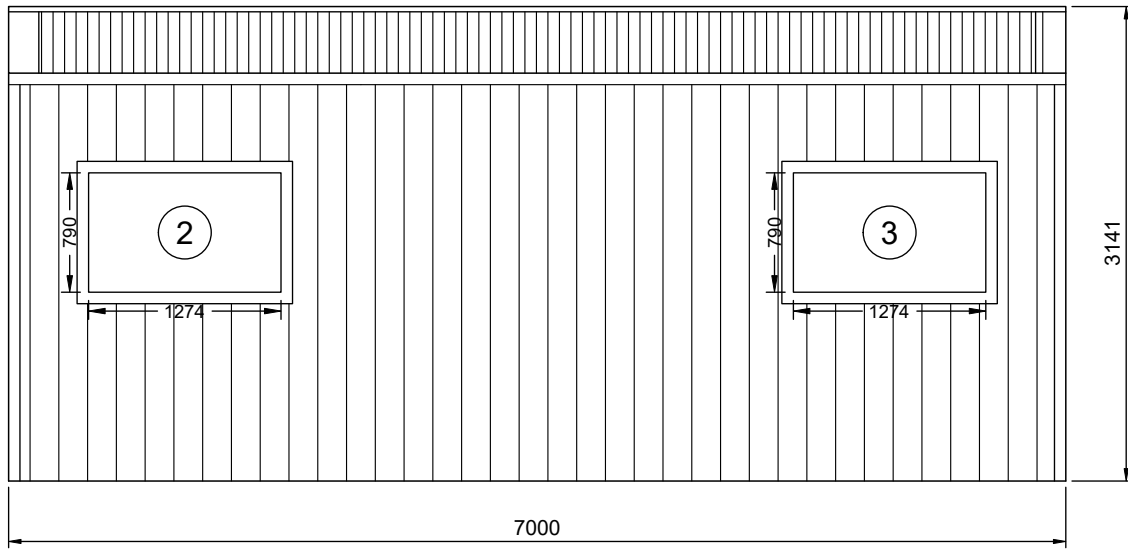


PO Box 3084
THIRROUL NSW 2515
sheds@venn.engineering
ABN 39 626 802 257

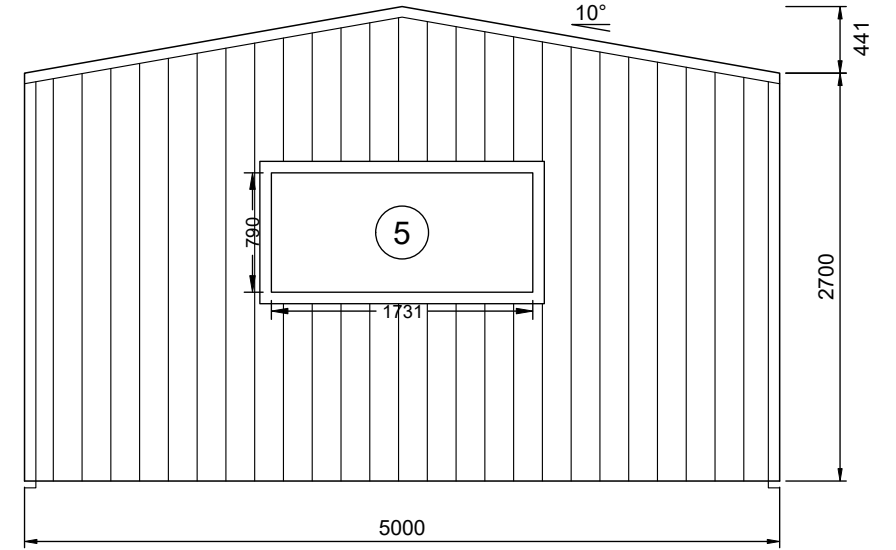
Signed *[Signature]* Date 17-11-2025
Grant J Wood MIEAust CPEng NER RPEQ
Registered EA Chartered Professional Engineer (No. 2383009)
Registered Professional Engineer QLD (No. 14384)
Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
Registered Certifying Engineer (structural) NT (No. 306371ES)
Building Services Provider (Engineer Civil) TAS (No. 699339425)

Customer Name: Travis Gray
Site Address: 87 King St
Westbury,
TAS, 7303

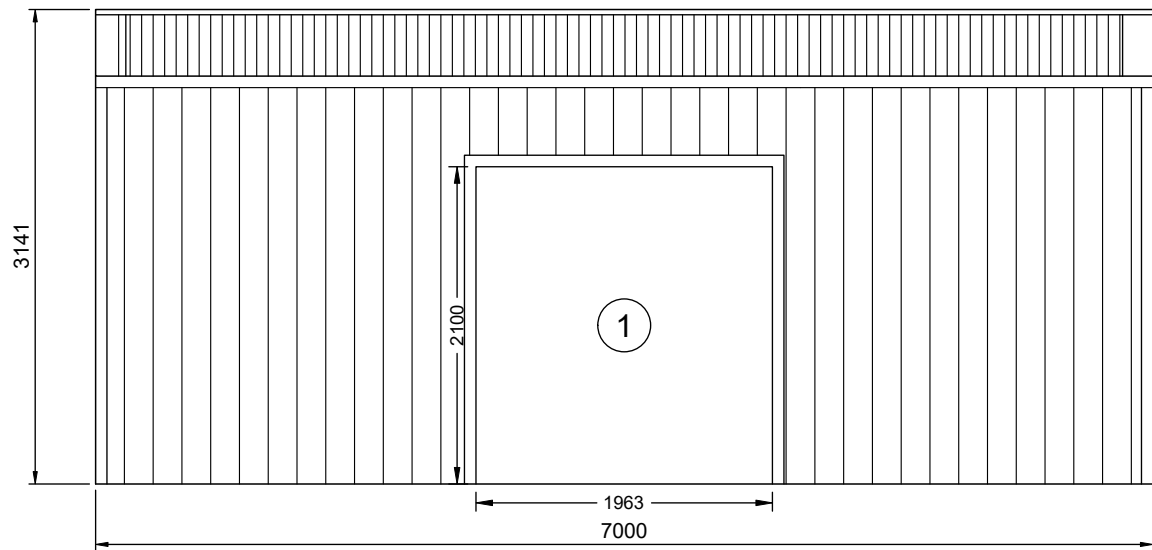
DATE 17-11-2025
JOB NO. LINV1021357300
SHEET 1 of 8



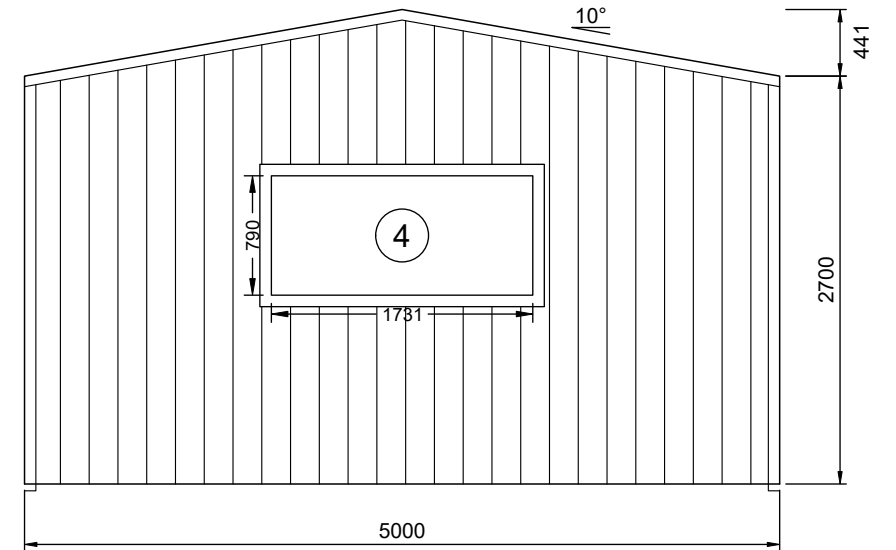
2 SIDEWALL B BUILDING ELEVATION
2 SCALE: 1:50



3 REAR BUILDING ELEVATION
2 SCALE: 1:50

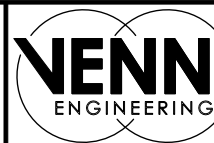


1 SIDEWALL A BUILDING ELEVATION
2 SCALE: 1:50



4 FRONT BUILDING ELEVATION
2 SCALE: 1:50

REV	DATE	DESCRIPTION
A	17-11-2025	-

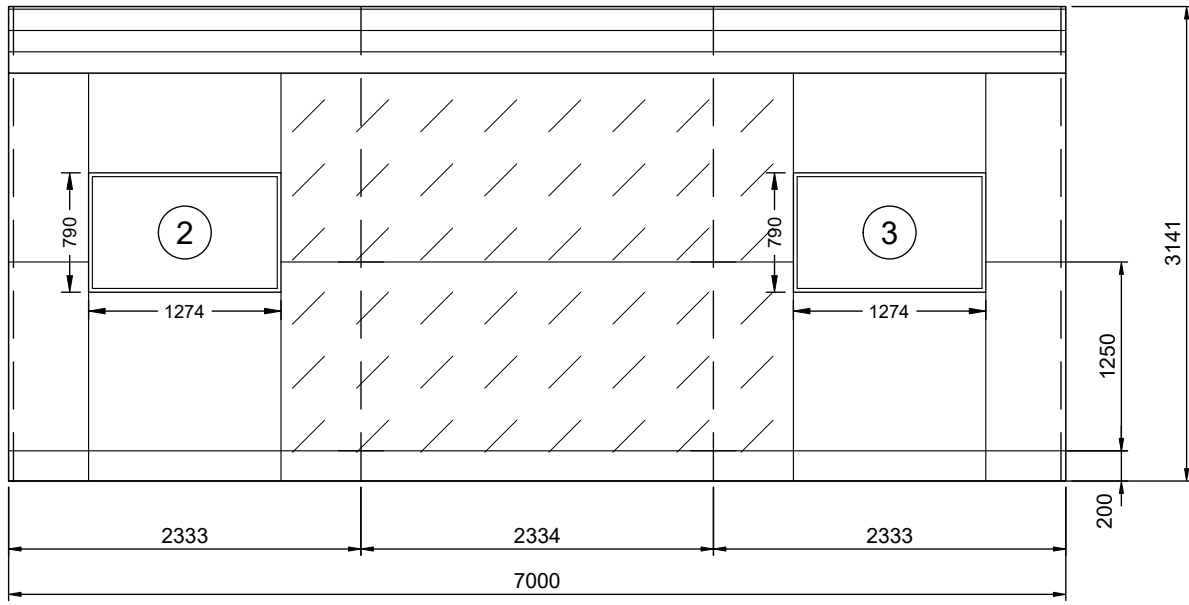


PO Box 3084
 THIRROUL NSW 2515
 sheds@venn.engineering
 ABN 39 626 802 257

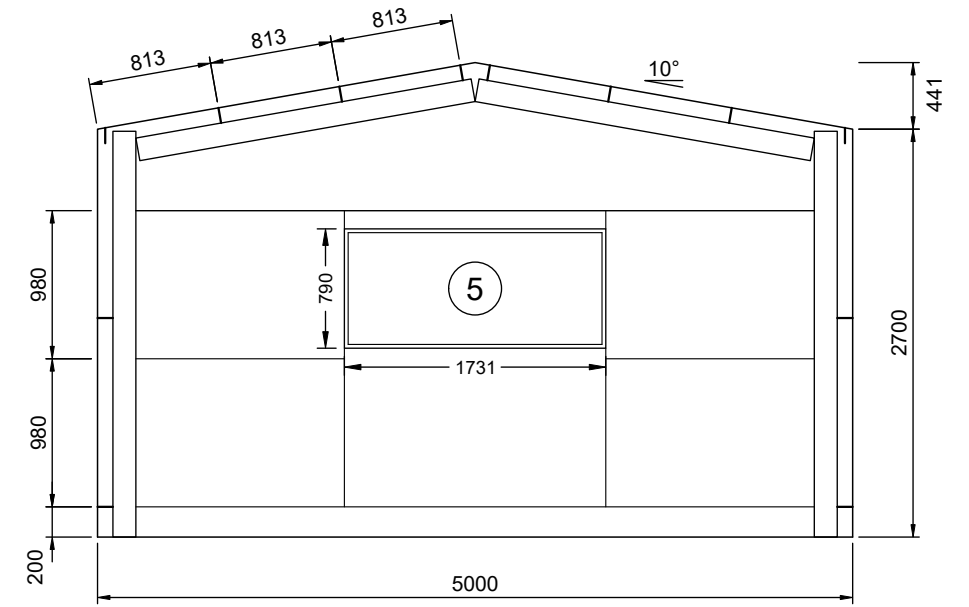
Signed *[Signature]* Date 17-11-2025
 Grant J Wood MIEAust CPEng NER RPEQ
 Registered EA Chartered Professional Engineer (No. 2383009)
 Registered Professional Engineer QLD (No. 14384)
 Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
 Registered Certifying Engineer (structural) NT (No. 306371ES)
 Building Services Provider (Engineer Civil) TAS (No. 69933425)

Customer Name: Travis Gray
 Site Address: 87 King St
 Westbury,
 TAS, 7303

DATE 17-11-2025
 JOB NO. LINV1021357300
 SHEET 2 of 8



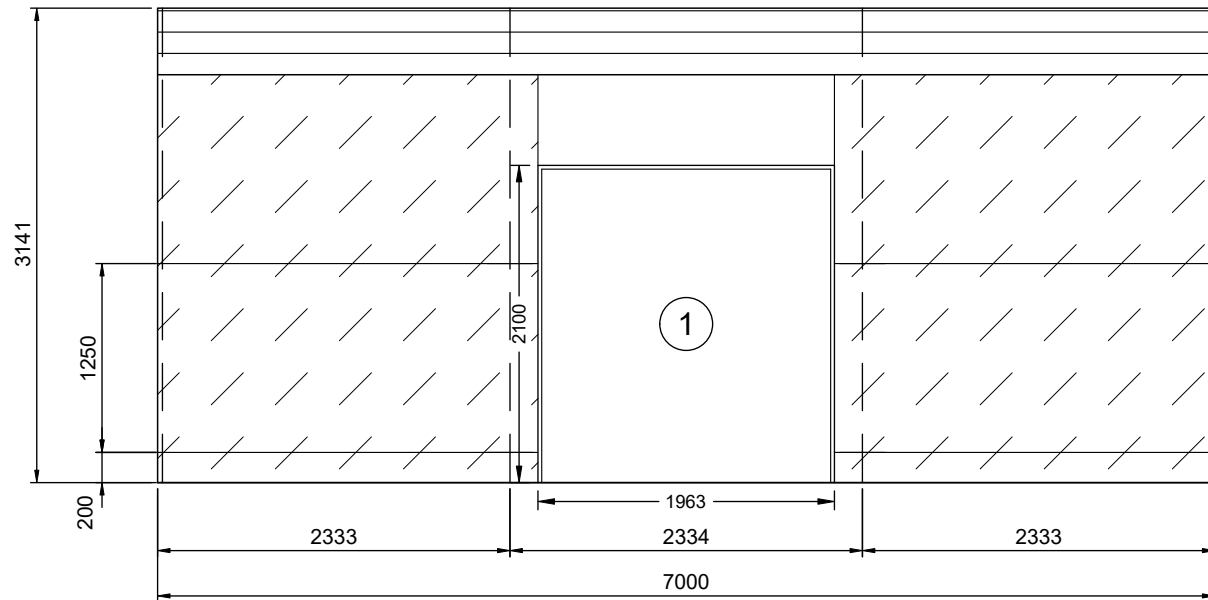
2 SIDEWALL B FRAMING ELEVATION
3 SCALE: 1:50



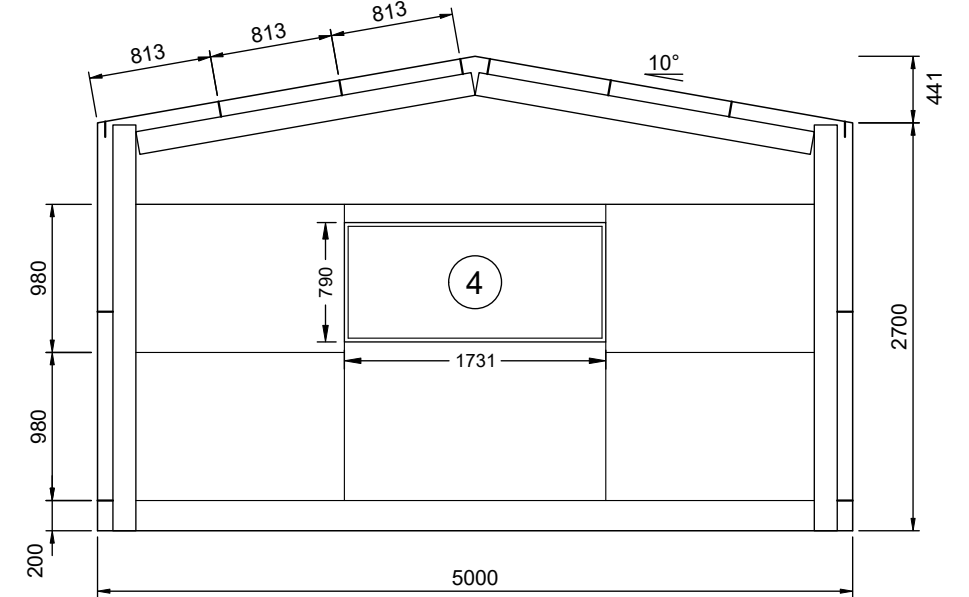
3 REAR FRAMING ELEVATION
3 SCALE: 1:50 FRAME #4

DIAPHRAGM SCHEDULE
 SHEETING IN DIAPHRAGM SECTIONS (SHOWN
 AS HATCHED AREA ON ELEVATIONS) NOT TO
 BE CUT UNDER ANY CIRCUMSTANCES

WALL	DISTANCE FROM WALL EDGE
Sidewall 'A'	0-2519 4482-7000
Sidewall 'B'	1804-5196



1 SIDEWALL A FRAMING ELEVATION
3 SCALE: 1:50

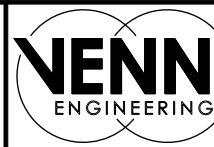


4 FRONT FRAMING ELEVATION
3 SCALE: 1:50 FRAME #1

REV	DATE	DESCRIPTION
A	17-11-2025	-



ANOTHER
 COLD FORMED BUILDING
 DESIGNED BY
 ACT BUILDING SYSTEMS

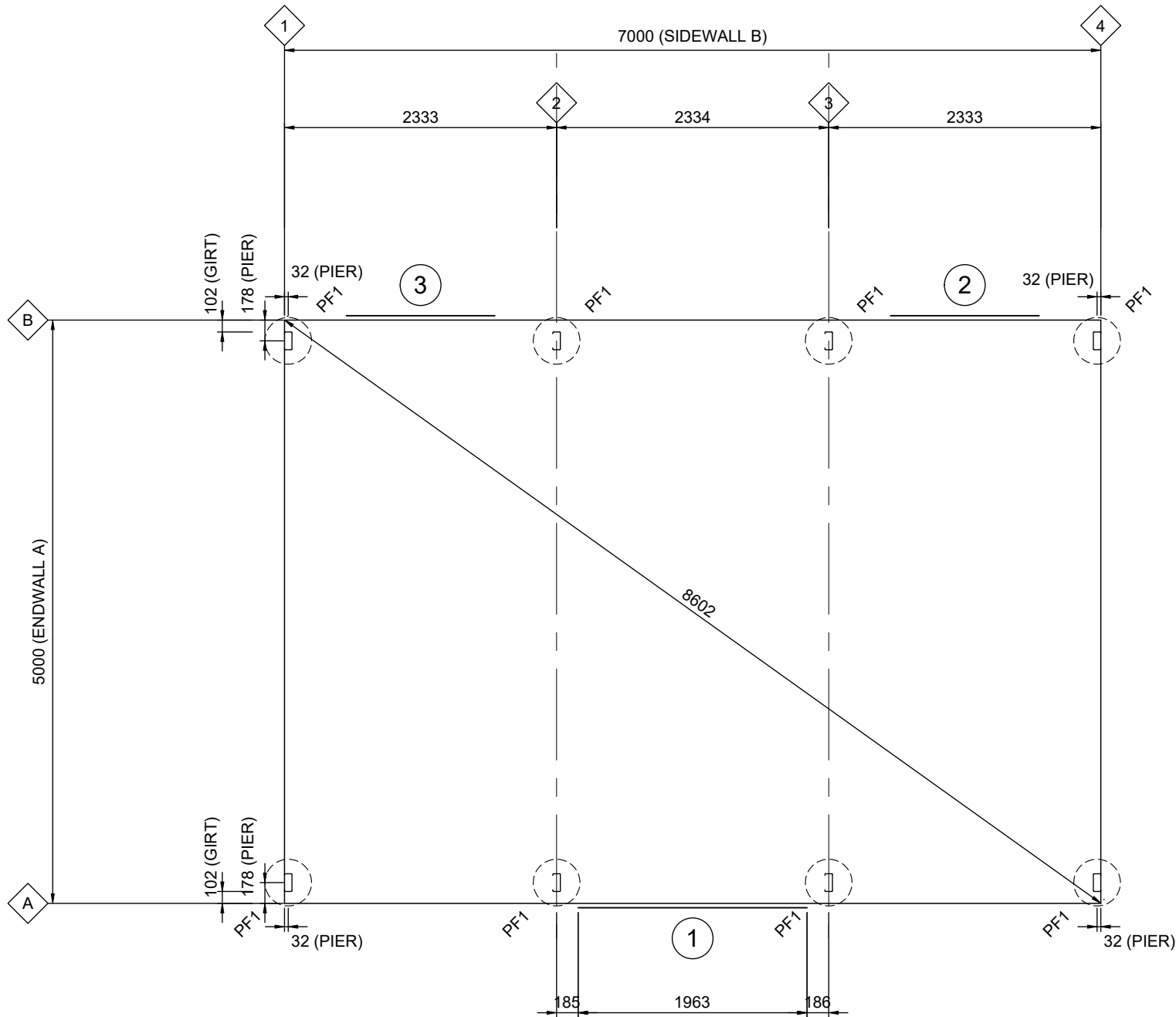


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 sheds@venn.engineering
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Signed *[Signature]* Date 17-11-2025
 Grant J Wood MIEAust CPEng NER RPEQ
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 Registered Professional Engineer QLD (No. 14384)
 Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
 Registered Certifying Engineer (structural) NT (No. 306371ES)
 Building Services Provider (Engineer Civil) TAS (No. 69933425)

Customer Name: Travis Gray
 Site Address: 87 King St
 Westbury,
 TAS, 7303

DATE 17-11-2025
 JOB NO. LINV1021357300
 SHEET 3 of 8

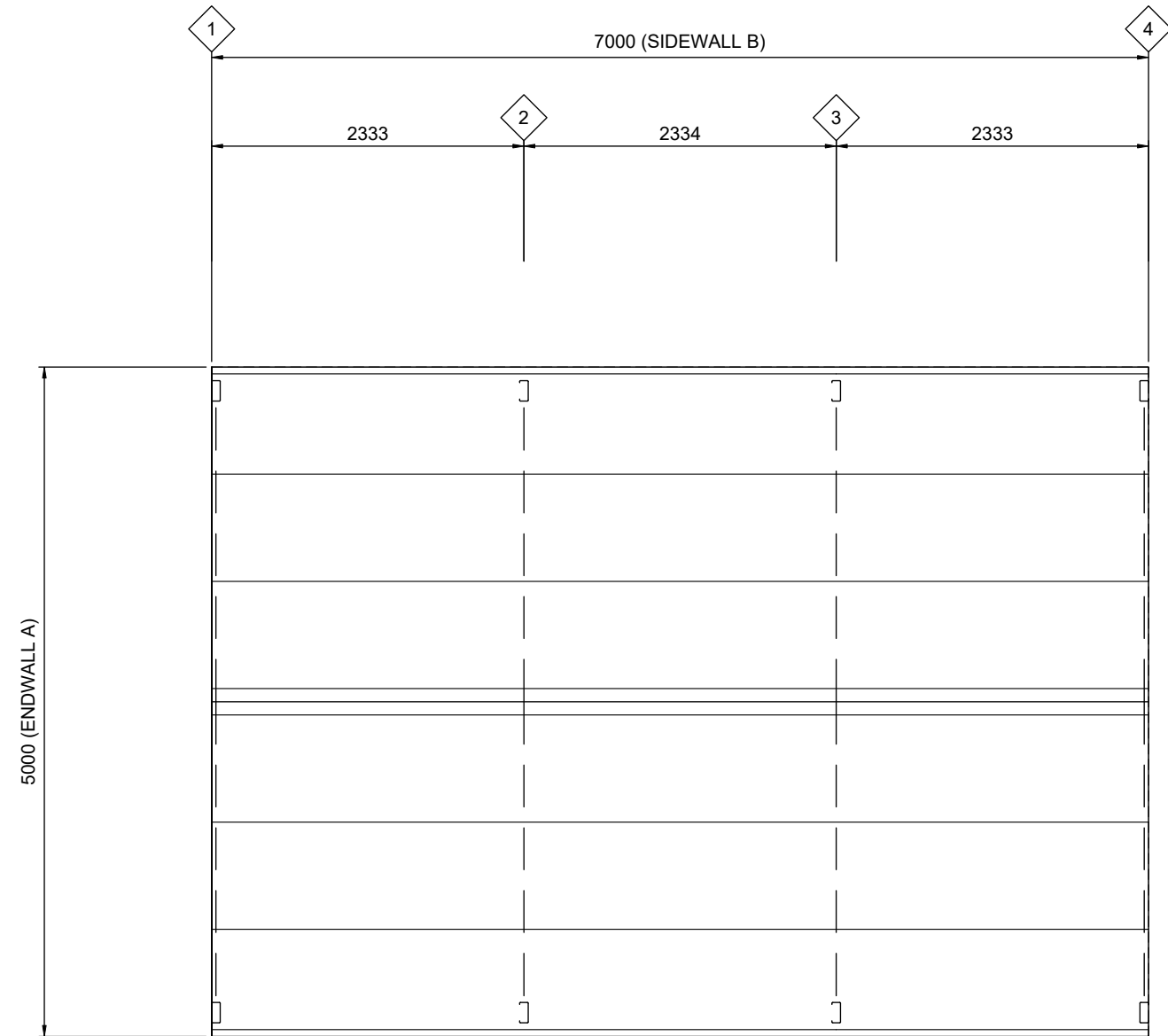


1 FOOTING/SLAB FLOOR PLAN

4 SCALE: 1:50 PF1 - 400Ø REINFORCED CONCRETE PIERS TO DETAIL

SLAB IS DESIGNED FOR CARS AND LIGHT VANS
NOT EXCEEDING 3500kg GROSS MASS

CONCRETE CONTROL JOINTS SHALL BE PROVIDED IN SLAB TO DETAIL AT
NOT MORE THAN 10m CENTRES IN EACH DIRECTION, APPROXIMATELY
EQUALLY SPACED AND LOCATED APPROXIMATELY MIDWAY BETWEEN
COLUMNS/MULLIONS

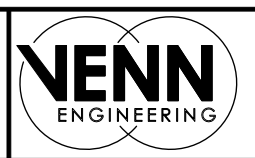


2 ROOF FRAMING PLAN

4 SCALE: 1:50

ROOF SHEETING IS USED AS DIAPHRAGM TO BRACE THE
BUILDING AND IS NOT TO BE CUT UNDER ANY CIRCUMSTANCES

REV	DATE	DESCRIPTION
A	17-11-2025	-

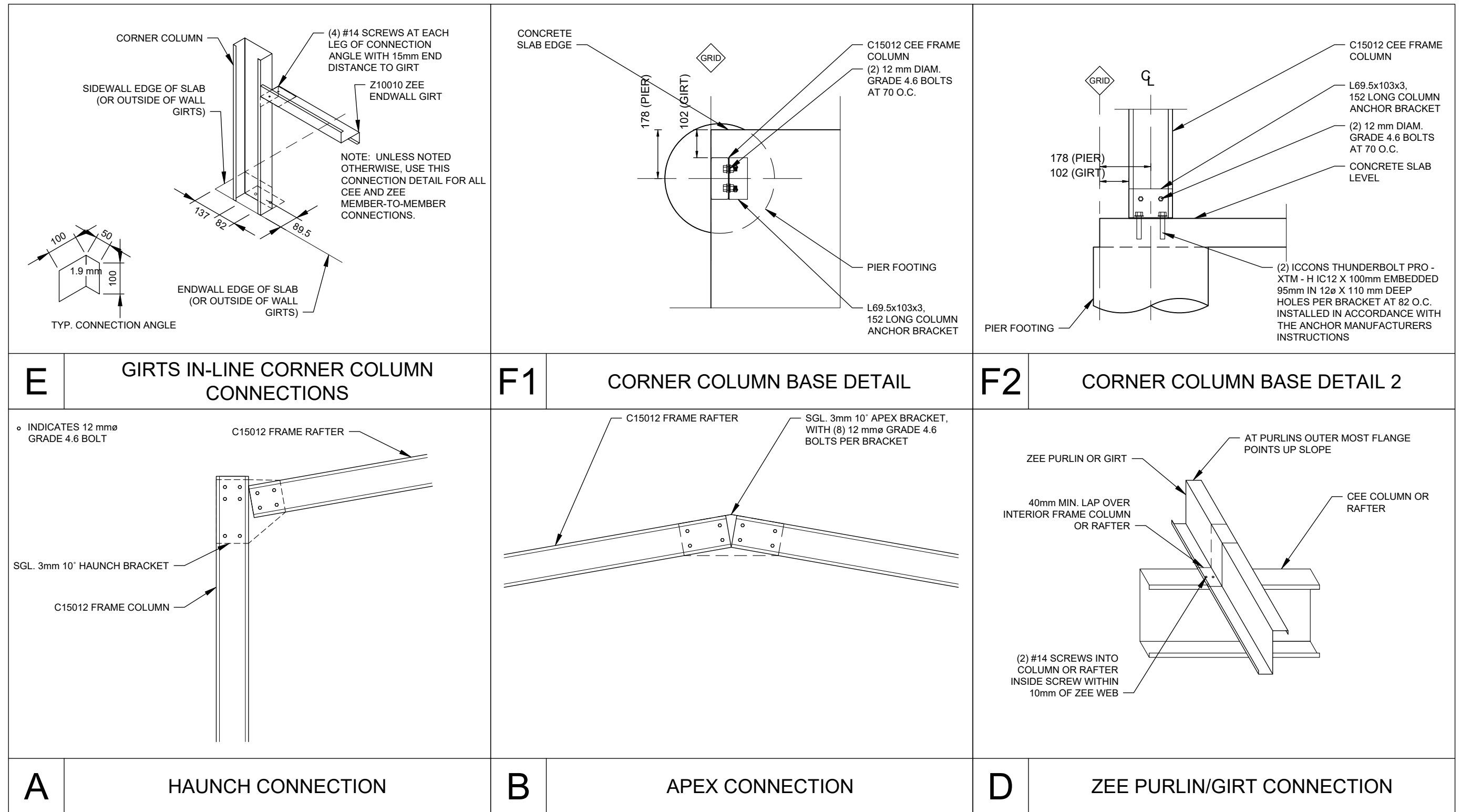


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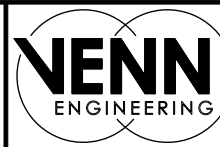
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SHEET 4 of 8



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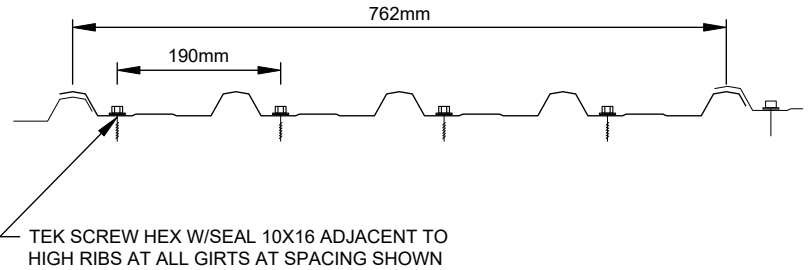
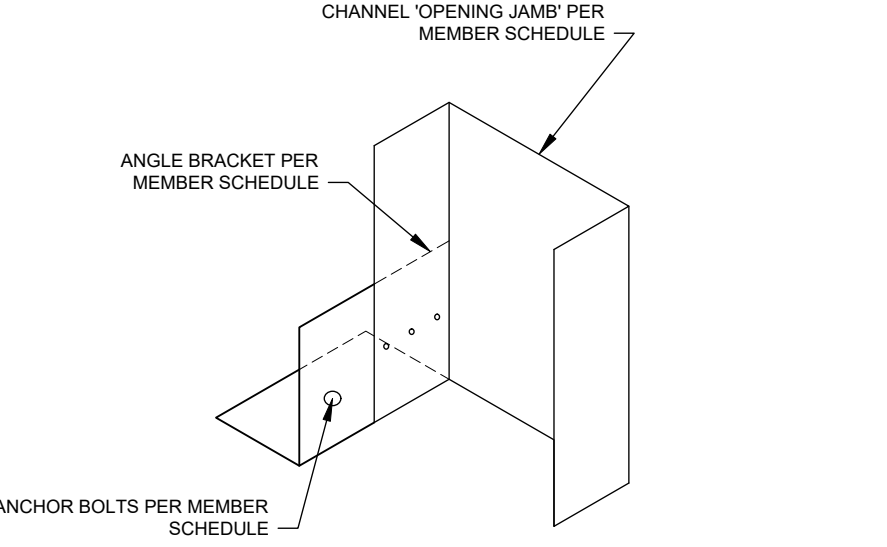
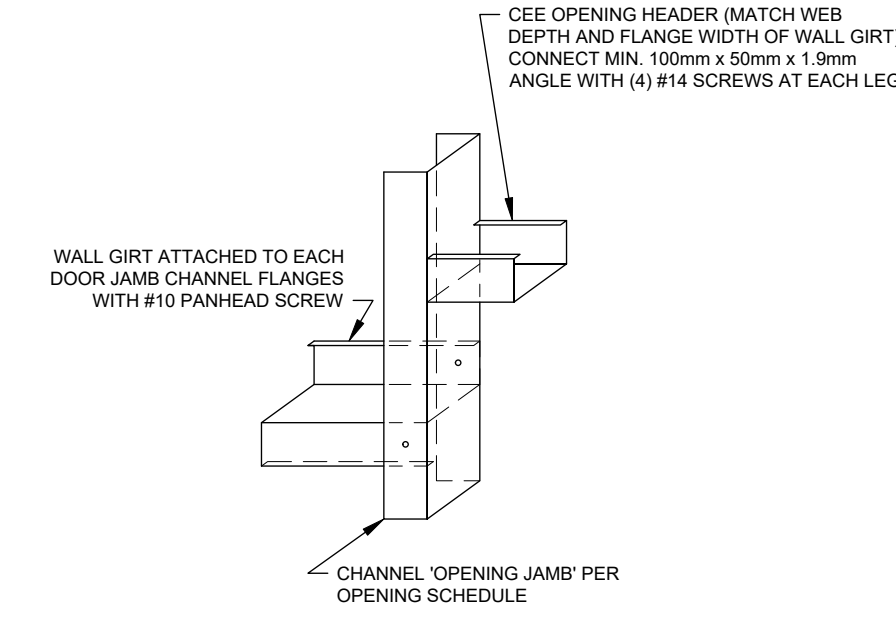
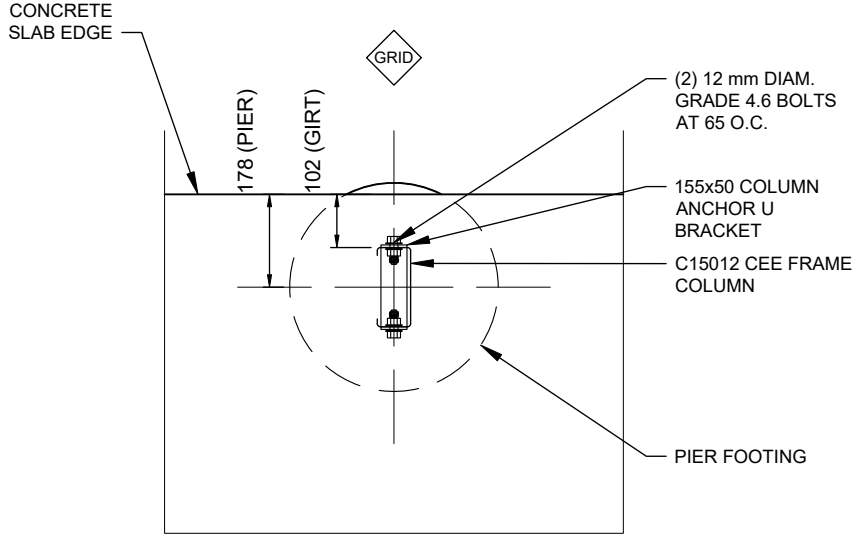
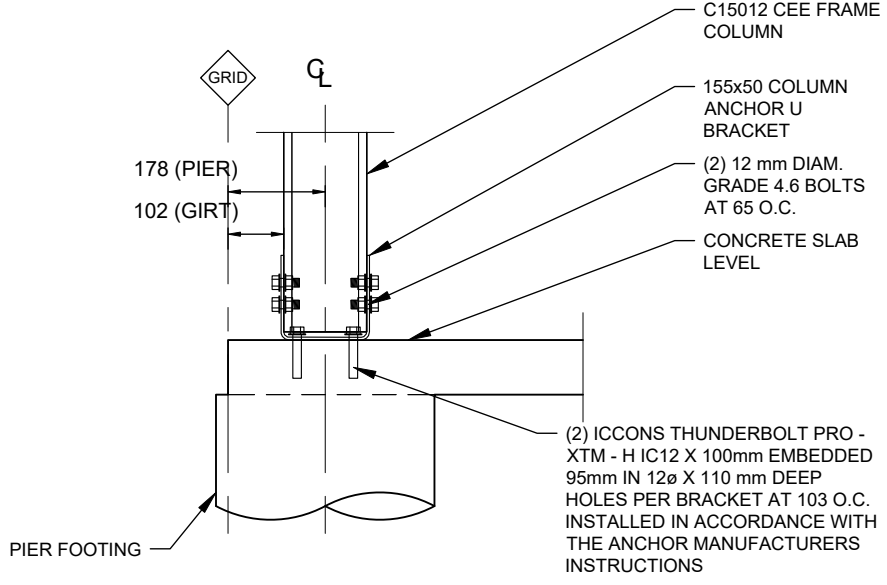
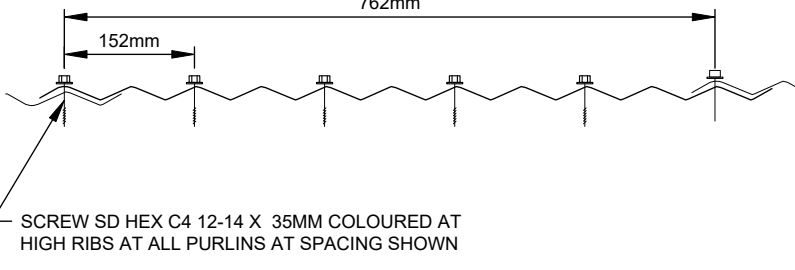


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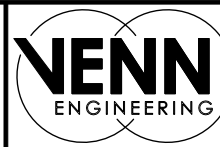
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 JOB NO. LINV1021357300
 SHEET 5 of 8

<p>NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADDT'L WEATHERTIGHTNESS RECOMMENDATIONS.</p>  <p>Steeline Steelclad 0.42</p>	 <p>CHANNEL 'OPENING JAMB' PER MEMBER SCHEDULE</p> <p>ANGLE BRACKET PER MEMBER SCHEDULE</p> <p>ANCHOR BOLTS PER MEMBER SCHEDULE</p>	 <p>CEE OPENING HEADER (MATCH WEB DEPTH AND FLANGE WIDTH OF WALL GIRT), CONNECT MIN. 100mm x 50mm x 1.9mm ANGLE WITH (4) #14 SCREWS AT EACH LEG</p> <p>WALL GIRT ATTACHED TO EACH DOOR JAMB CHANNEL FLANGES WITH #10 PANHEAD SCREW</p> <p>CHANNEL 'OPENING JAMB' PER OPENING SCHEDULE</p>
<p>I WALL SHEETING</p>	<p>J PA DOOR JAMB BASE CONNECTION</p>	<p>K OPENING JAMB GIRT CONNECTION</p>
 <p>CONCRETE SLAB EDGE</p> <p>GRID</p> <p>178 (PIER)</p> <p>102 (GIRT)</p> <p>(2) 12 mm DIAM. GRADE 4.6 BOLTS AT 65 O.C.</p> <p>155x50 COLUMN ANCHOR U BRACKET</p> <p>C15012 CEE FRAME COLUMN</p> <p>PIER FOOTING</p>	 <p>GRID</p> <p>178 (PIER)</p> <p>102 (GIRT)</p> <p>C15012 CEE FRAME COLUMN</p> <p>155x50 COLUMN ANCHOR U BRACKET</p> <p>(2) 12 mm DIAM. GRADE 4.6 BOLTS AT 65 O.C.</p> <p>CONCRETE SLAB LEVEL</p> <p>PIER FOOTING</p> <p>(2) ICCONS THUNDERBOLT PRO - XTM - H IC12 X 100mm EMBEDDED 95mm IN 12ø X 110 mm DEEP HOLES PER BRACKET AT 103 O.C. INSTALLED IN ACCORDANCE WITH THE ANCHOR MANUFACTURERS INSTRUCTIONS</p>	<p>NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADDT'L WEATHERTIGHTNESS RECOMMENDATIONS.</p>  <p>762mm</p> <p>152mm</p> <p>SCREW SD HEX C4 12-14 X 35MM COLOURED AT HIGH RIBS AT ALL PURLINS AT SPACING SHOWN</p> <p>Steeline Corrugated 0.42</p>
<p>F3 FRAME COLUMN BASE DETAIL</p>	<p>F4 FRAME COLUMN BASE DETAIL 2</p>	<p>H ROOF SHEETING</p>

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

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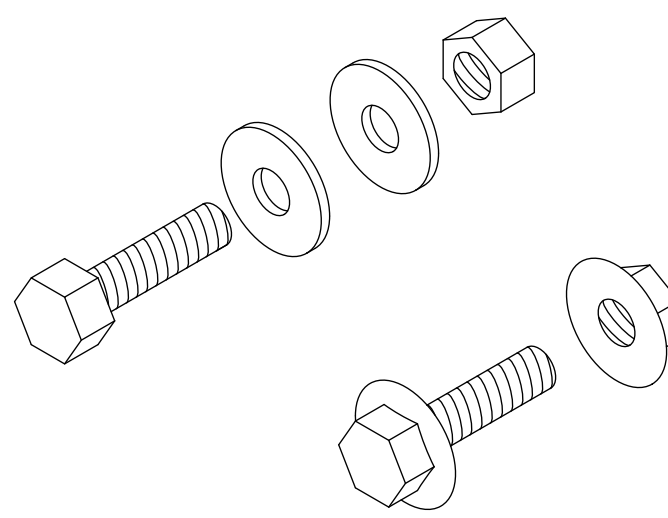
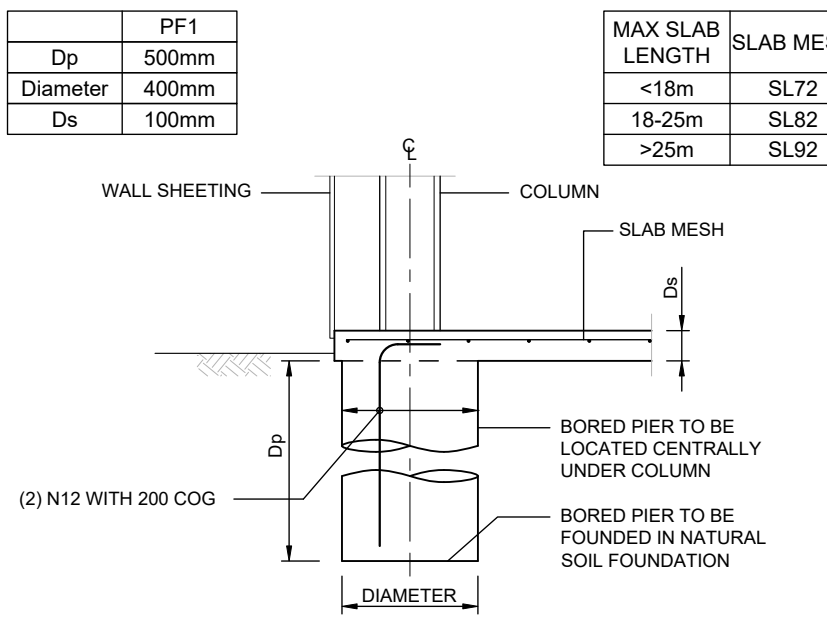
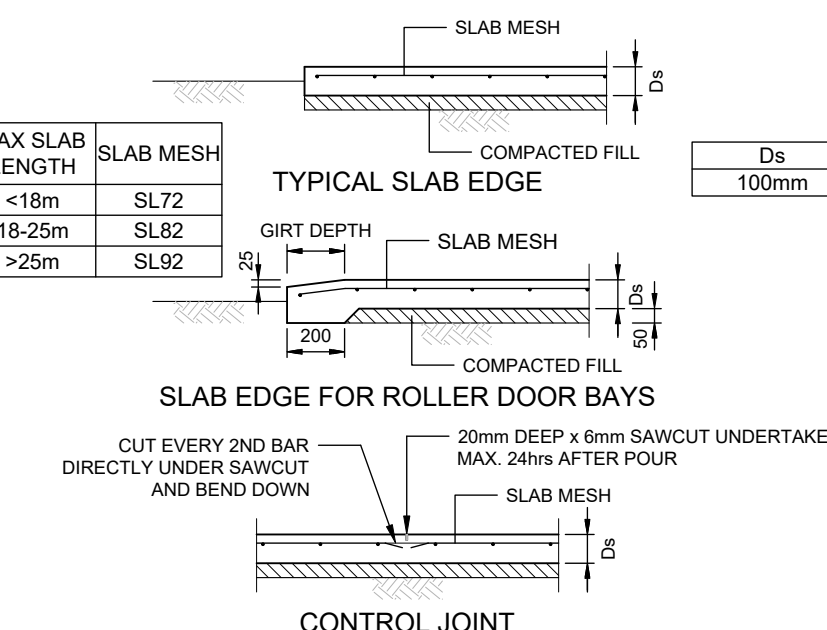
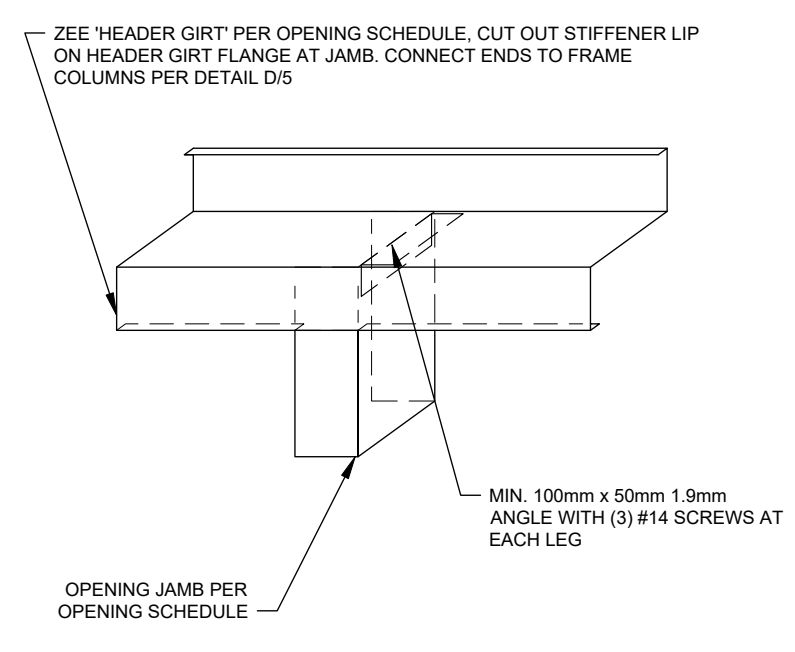
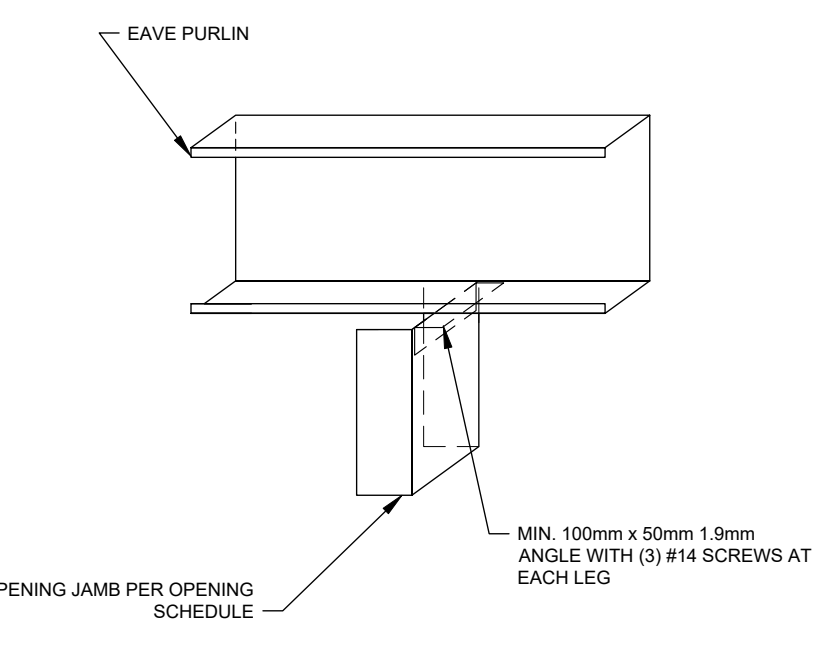
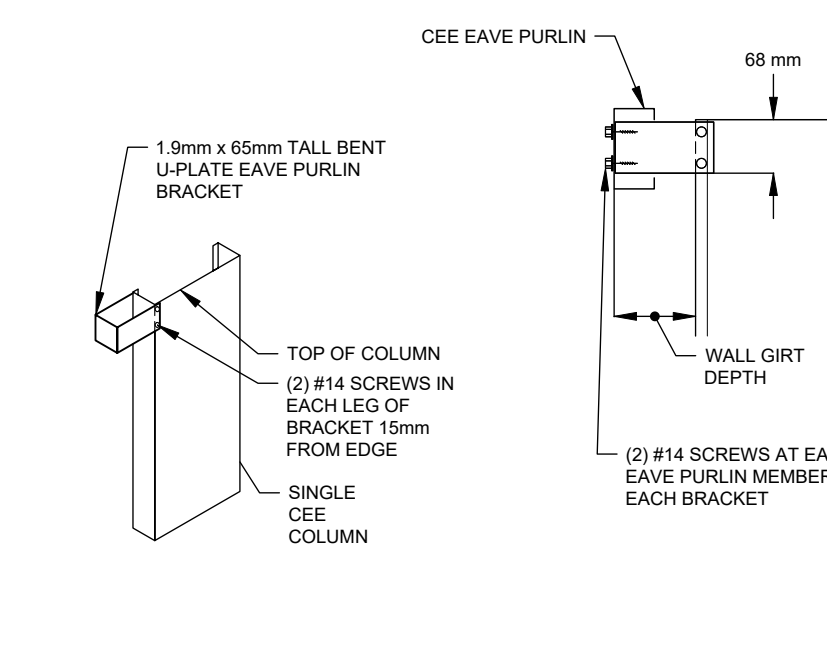


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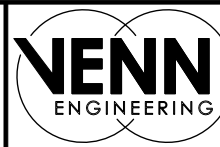
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DATE 17-11-2025
JOB NO. LINV1021357300
SHEET 6 of 8

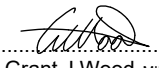
<p>ALL NUTS AND BOLTS TO HAVE WASHER OR FLANGED HEADS</p> 	<table border="1" style="float: left; margin-right: 20px;"> <tr><td></td><td>PF1</td></tr> <tr><td>Dp</td><td>500mm</td></tr> <tr><td>Diameter</td><td>400mm</td></tr> <tr><td>Ds</td><td>100mm</td></tr> </table> <table border="1" style="float: right; margin-left: 20px;"> <tr><td>MAX SLAB LENGTH</td><td>SLAB MESH</td></tr> <tr><td><18m</td><td>SL72</td></tr> <tr><td>18-25m</td><td>SL82</td></tr> <tr><td>>25m</td><td>SL92</td></tr> </table> 		PF1	Dp	500mm	Diameter	400mm	Ds	100mm	MAX SLAB LENGTH	SLAB MESH	<18m	SL72	18-25m	SL82	>25m	SL92	<table border="1" style="float: left; margin-right: 20px;"> <tr><td>MAX SLAB LENGTH</td><td>SLAB MESH</td></tr> <tr><td><18m</td><td>SL72</td></tr> <tr><td>18-25m</td><td>SL82</td></tr> <tr><td>>25m</td><td>SL92</td></tr> </table> 	MAX SLAB LENGTH	SLAB MESH	<18m	SL72	18-25m	SL82	>25m	SL92
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 <p>ZEE 'HEADER GIRT' PER OPENING SCHEDULE, CUT OUT STIFFENER LIP ON HEADER GIRT FLANGE AT JAMB. CONNECT ENDS TO FRAME COLUMNS PER DETAIL D/5</p> <p>MIN. 100mm x 50mm 1.9mm ANGLE WITH (3) #14 SCREWS AT EACH LEG</p> <p>OPENING JAMB PER OPENING SCHEDULE</p>	 <p>EAVE PURLIN</p> <p>MIN. 100mm x 50mm 1.9mm ANGLE WITH (3) #14 SCREWS AT EACH LEG</p> <p>OPENING JAMB PER OPENING SCHEDULE</p>	 <p>1.9mm x 65mm TALL BENT U-PLATE EAVE PURLIN BRACKET</p> <p>TOP OF COLUMN</p> <p>(2) #14 SCREWS IN EACH LEG OF BRACKET 15mm FROM EDGE</p> <p>SINGLE CEE COLUMN</p> <p>CEE EAVE PURLIN</p> <p>68 mm</p> <p>WALL GIRT DEPTH</p> <p>(2) #14 SCREWS AT EACH EAVE PURLIN MEMBER TO EACH BRACKET</p>																								
<p>L1 JAMB TO HEADER GIRT CONNECTION</p>	<p>L2 JAMB TO CEE CONNECTION</p>	<p>O EAVE PURLIN BRACKET</p>																								

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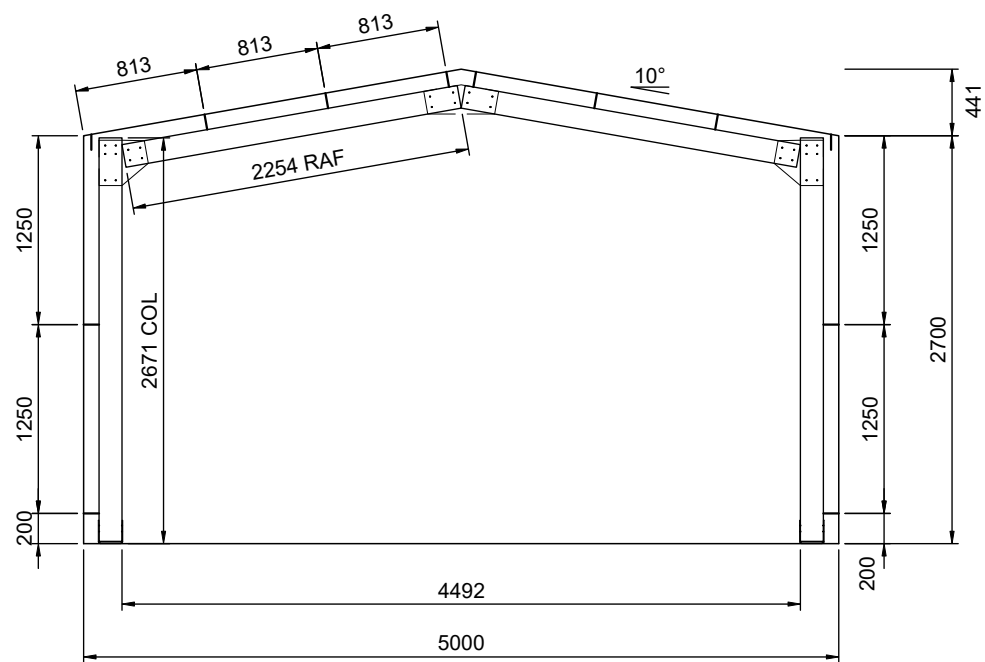


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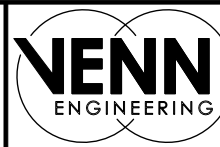
DATE 17-11-2025
JOB NO. LINV1021357300
SHEET 7 of 8



1 INTERNAL FRAMING ELEVATION
8 SCALE: 1:50 FRAMES 2, 3

MEMBER SCHEDULE			
COMPONENT		TYPE	
CLEAR SPAN PORTAL (FRAMES 2, 3)	MEMBER	RAFTER	Single C15012
		COLUMN	Single C15012
		APEX BRACE	-
	BASE CONNECTION	KNEE BRACE	-
BRACKET TYPE		Base cleat bolt down bracket BC.150	
ENDWALL PORTAL (FRAMES 1, 4)	MEMBER	ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm
		RAFTER	Single C15012
		COLUMN	Single C15012
	BASE CONNECTION	APEX BRACE	-
KNEE BRACE		-	
ROOF PURLINS	MEMBER	BRACKET TYPE	Angle base connection ABC.C150.70
		ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm
EAVE PURLIN	MEMBER	Single Z10010 @ 813mm centres	
SIDEWALL GIRTS	MEMBER	Single C10015	
ENDWALL GIRTS	MEMBER	Single Z10010 @ 1250mm centres	
OPENINGS (1-3)	MEMBER	JAMB	Single Unlipped 102 x 1.5 Cee
		HEADER/SILL	Single C10015
	BASE CONNECTION	BRACKET TYPE	Angle base connection ABC.SINGLE
OPENINGS (4-5)	MEMBER	ANCHOR BOLTS	(1) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm
		JAMB	Single Unlipped 102 x 1.5 Cee
		HEADER/SILL	Single C10015

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 SHEET 8 of 8

Generic Temporary Bracing Information

The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials

The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.

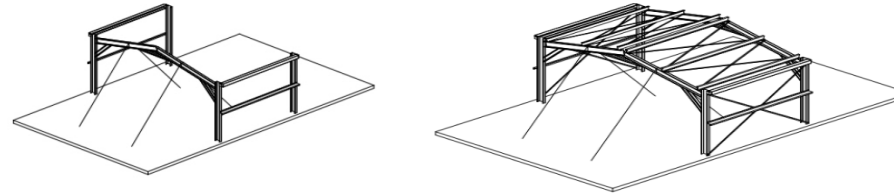


Fig 1. Frame First Temporary Bracing on First Rafter Installed Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground and then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.

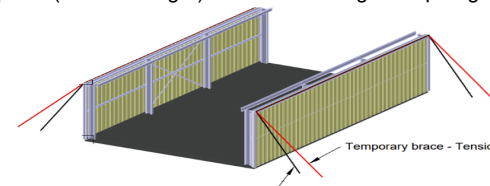


Fig 3. Tilt Up Method - Temporary Bracing

Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

Bracing Removal

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/> 'Construction work – steel erection. Information sheet', 2016.

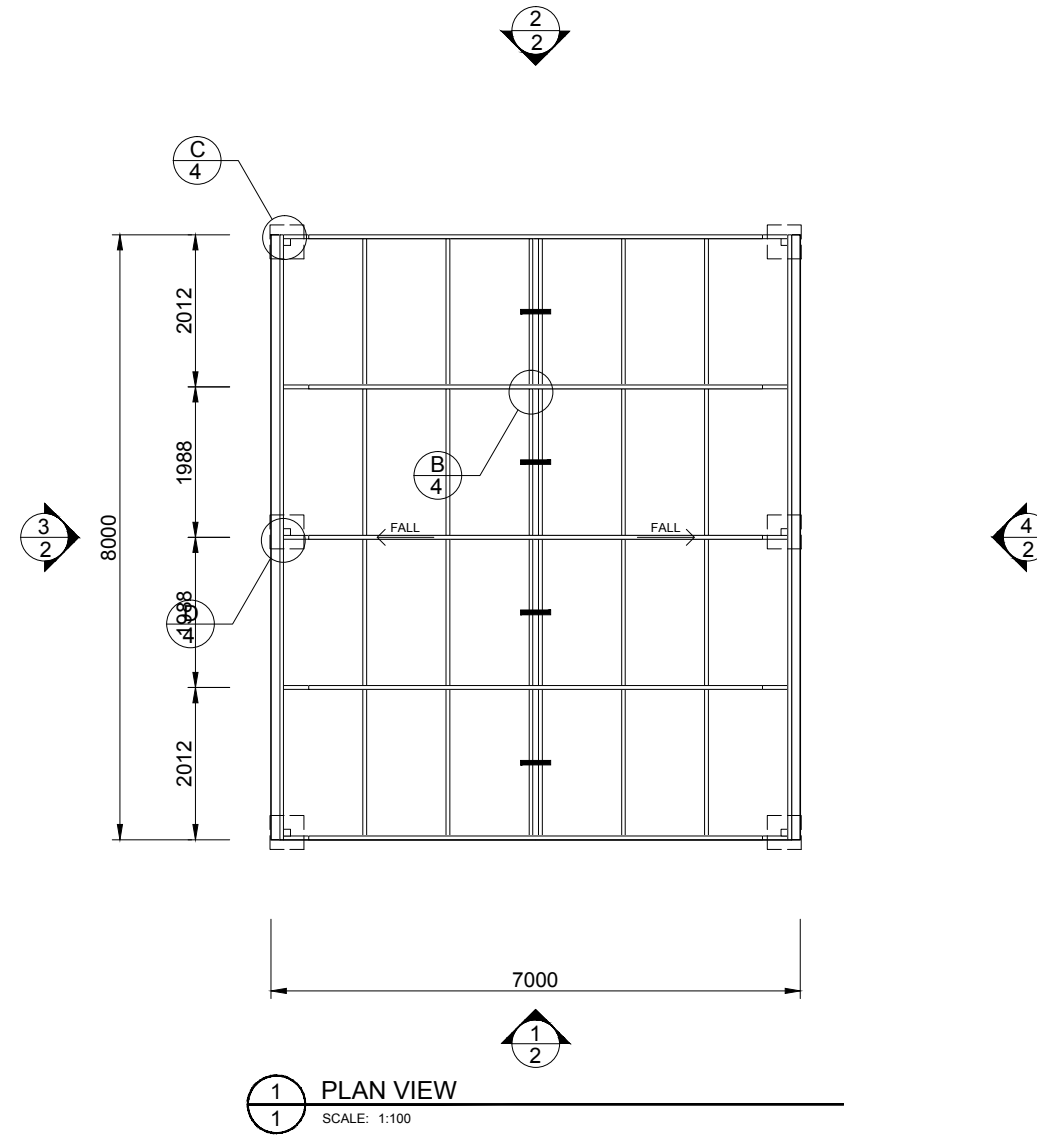
<https://www.steel.org.au/> 'Structural steelwork fabrication and erection code of practice', 2014.

<https://www.standards.org.au/> AS/NZS 5131:2016 'Structural steelwork – Fabrication and erection'.

Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

Dimensions are to outside of gutter where gutter is present (gutter width:115mm)



☐ DENOTES FOOTING AS DETAILED ON SHEET 4

No Foot Traffic Roof



PROJECT BY
FDB Launceston (Patios)
03 6334 5535
FOR
Travis Gray
AT
87 King Street
Westbury

NORTHERN CONSULTING
engineers
Civil & Structural Engineers
50 Punari Street
Currajong, Qld 4812
Fax: 07 4725 5850
Email: design@nceng.com.au
ABN 341 008 173 56

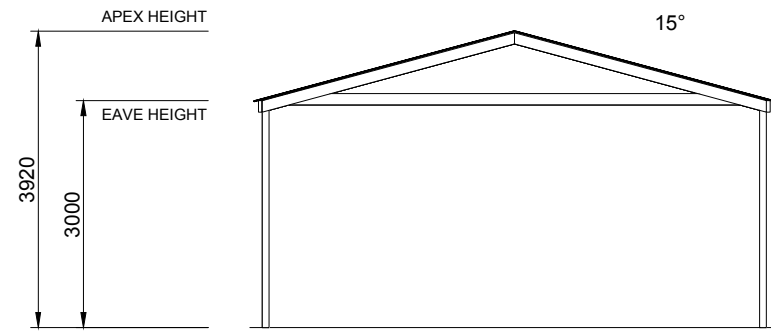
Registered Chartered Professional Engineer
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Regn. No. 2558980
Regn. No. 9985
Regn. No. 116373ES
Regn. No. PE0002216
Regn. No. CC5648M

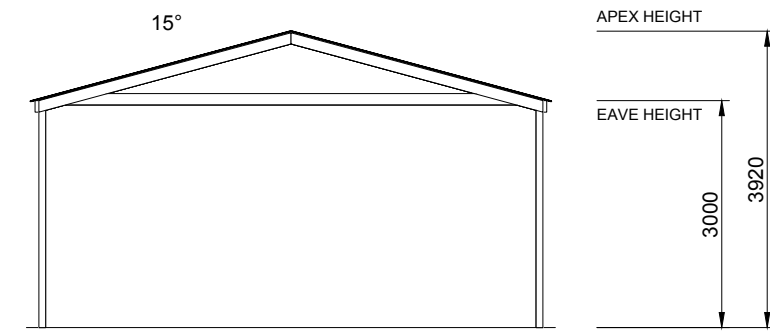
Mr Timothy Roy Messer BE MIEAust RPEQ
Signature *T. Messer*
Date 14/11/2025
Registered on the NPER in the areas of practice
of Civil & Structural National Professional
Engineers Register

DRAWN	FDB
CHECKED	N/A
DATE	14/11/2025
JOB NO.	FDFDLC100162

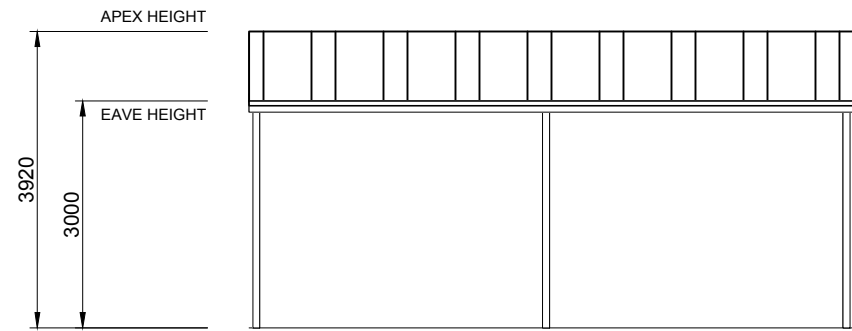
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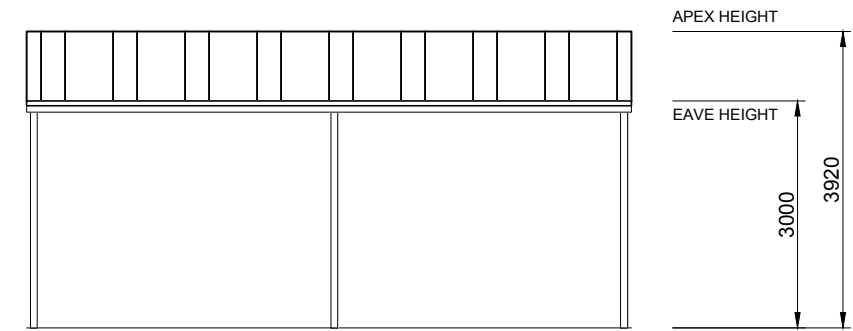
1 FRONT EXTERIOR ELEVATION
2 SCALE: 1:100



2 BACK EXTERIOR ELEVATION
2 SCALE: 1:100



3 LEFT EXTERIOR ELEVATION
2 SCALE: 1:100



4 RIGHT EXTERIOR ELEVATION
2 SCALE: 1:100



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Registered Engineer - (Civil) VIC
Registered Engineer - (Civil) TAS

Mr Timothy Roy Messer BE MIEAust RPEQ
Signature *T. Messer*
Date 14/11/2025
Registered on the NPER in the areas of practice
of Civil & Structural National Professional
Engineers Register

DRAWN	FDB
CHECKED	N/A
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JOB NO.	FDFDLC100162

SHEET
2
5

STRUCTURAL GENERAL NOTES

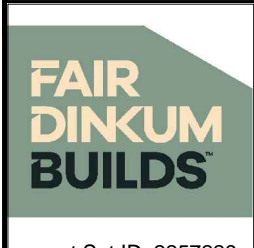
- I. **GOVERNING CODE** : BUILDING CODE OF AUSTRALIA (BCA), LOADING TO AS1170 - ALL SECTIONS.
- II. **DRAWING OWNERSHIP** : THESE DRAWINGS REMAIN THE PROPERTY OF FBHS PTY LIMITED. DRAWINGS ARE PROVIDED FOR THE DUAL PURPOSE OF OBTAINING BUILDING PERMITS AND AIDING CONSTRUCTION. ANY OTHER USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN APPROVAL.
- III. **DRAWING SIGNATURE REQUIREMENTS**: EACH TITLE BLOCK CONTAINS A WATER MARK UNDER THE CUSTOMERS NAME CONTAINING THE DATE OF PRODUCTION OF THE DRAWINGS;THE DRAWINGS ARE TO BE SUBMITTED TO COUNCIL WITHIN 21 DAYS OF THIS DATE. THIS IS TO ENSURE THAT ONLY CURRENT DRAWINGS ARE IN CIRCULATION.
- IV. **CONTRACTOR RESPONSIBILITIES** : CONTRACTOR SHALL VERIFY AND CONFIRM ALL EXISTING CONDITIONS AND DIMENSIONS. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS PRIOR TO START OF WORK. CONTRACTOR MUST NOT MAKE ANY DEVIATION FROM THE PROVIDED PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE UNDERSIGNING ENGINEER. THE ENGINEER / FBHS TAKE NO RESPONSIBILITY FOR CHANGES MADE WITHOUT WRITTEN APPROVAL. CONTRACTOR IS RESPONSIBLE FOR ENSURING NO PART OF THE STRUCTURE BECOMES OVERSTRESSED DURING CONSTRUCTION. BUILDING IS NOT STRUCTURALLY ADEQUATE UNTIL THE INSTALLATION OF ALL COMPONENTS AND DETAILS SHOWN ARE COMPLETED IN ACCORDANCE WITH THESE DRAWINGS. THE INDICATED DRAWING SCALES ARE APPROXIMATE. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. FOR FURTHER DIRECTIONS ON CONSTRUCTION THE CONTRACTOR SHOULD CONSULT THE APPROPRIATE INSTRUCTION MANUAL.
- V. **ENGINEERING** : THE ENGINEER / FBHS ARE NOT ACTING AS PROJECT MANAGERS FOR THIS DEVELOPMENT, AND WILL NOT BE PRESENT DURING CONSTRUCTION. THE ENGINEERS HAVE REVIEWED THIS BUILDING FOR CONFORMITY ONLY TO THE STRUCTURAL DESIGN PORTIONS OF THE GOVERNING CODE. THE PROJECT MANAGER IS RESPONSIBLE FOR ADDRESSING ANY OTHER CODE REQUIREMENTS APPLICABLE TO THIS DEVELOPMENT. IT IS THE RESPONSIBILITY OF THE PURCHASER TO COORDINATE DRAWINGS PROVIDED WITH OTHER PLANS AND/OR OTHER COMPONENTS THAT ARE PART OF THE OVERALL PROJECT. IN CASES OF DISCREPANCIES, THE LATEST DRAWINGS PROVIDED BY FBHS SHALL GOVERN.
- VI. **INSPECTIONS** : NO SPECIAL INSPECTIONS ARE REQUIRED BY THE GOVERNING CODE ON THIS JOB. ANY OTHER INSPECTIONS REQUESTED BY THE LOCAL BUILDING DEPARTMENT SHALL BE CONDUCTED AT THE OWNER'S EXPENSE.
- VII. **SOIL REQUIREMENTS** : DESIGN FOR SOIL CLASSIFICATION M. SOIL SAFE BEARING CAPACITY VALUE INDICATED ON DRAWING SHEET 3 OCCURS AT 100mm BELOW FINISH GRADE, EXISTING NATURAL GRADE, OR AT FROST DEPTH SPECIFIED BY LOCAL BUILDING DEPARTMENT, WHICHEVER IS THE LOWEST ELEVATION. REGARDLESS OF DETAIL A ON SHEET 4 THE MINIMUM FOUNDATION DEPTH SHOULD BE 100MM INTO NATURAL GROUND OR BELOW FROST DEPTH SPECIFIED BY LOCAL COUNCIL. ROLLED OR COMPACTED FILL MAY BE USED UNDER SLAB, COMPACTED IN 150mm LAYERS TO A MAXIMUM DEPTH OF 900mm. CONCRETE FOUNDATION EMBEDMENT DEPTHS DO NOT APPLY TO LOCATIONS WHERE ANY UNCOMPACTED FILL OR DISTURBED GROUND EXISTS OR WHERE WALLS OF THE EXCAVATION WILL NOT STAND WITHOUT SUPPLEMENTAL SUPPORT, IN THIS CASE SEEK FURTHER ENGINEERING ADVICE. FOOTING DESIGN ASSUMES A CLAYEY SOIL TYPE PRESENT, IF SOIL TYPE ON SITE IS IN FACT SAND OR ROCK, PLEASE CONFIRM WITH THE ENGINEER THE ADEQUACY OF THE FOOTING.
- VIII. **CONCRETE REQUIREMENTS** : ALL CONCRETE DETAILS AND PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH AS2870 AND AS3600. CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 20MPa FOR EXPOSURE A1, 25MPa FOR EXPOSURE A2, 32MPa FOR EXPOSURE B1, 40MPa FOR EXPOSURE B2 AND 50MPa FOR EXPOSURE C, IN ACCORDANCE WITH SECTION 4, AS3600. CEMENT TO BE TYPE A. MAX AGGREGATE SIZE OF 20mm. SLUMP TO BE 80mm +/-15mm. SLABS TO BE CURED FOR 7 DAYS BY WATERING OR COVERING WITH A PLASTIC MEMBRANE, AFTER WHICH CONSTRUCTION CAN BEGIN, DUE CARE GIVEN NOT TO OVER-TIGHTEN HOLD DOWN BOLTS. GIVEN ALLOWABLE SOIL TYPES 1 LAYER OF SL72 REINFORCING MESH IS TO BE INSTALLED ON STANDARD SLABS WITH A MINIMUM 30MM COVER FROM CONCRETE SURFACE. CONCRETE REINFORCING TO CONFORM TO AS 1302, AS1303 & AS 1304. ALL REINFORCING COVER TO BE A MINIMUM OF 30mm.
- IX. **STRUCTURAL STEEL REQUIREMENTS** : ALL STRUCTURAL STEEL, INCLUDING SHEETING THOUGH EXCLUDING CONCRETE REINFORCING, SHALL CONFORM TO AS 1397 (GAUGE <= 1mm fy = 550MPa, GAUGE > 1mm < 1.5mm fy = 500MPa, GAUGE >= 1.5mm fy = 450MPa). NO WELDING IS TO BE PERFORMED ON THIS BUILDING. ALL STRUCTURAL MEMBERS AND CONNECTIONS DESIGNED TO AS4600. ALL BOLT HOLE DIAMETERS TO FBHS GENERAL PUNCHINGS.

MEMBER AND MATERIAL SCHEDULE

1	GABLE(1) PURLIN	100 x 50 x 1.0mm thick Colorbond Beam
2	GABLE(1) PURLIN SPACING	1.12 m. Max. (2 Rows)
3	GABLE(1) PURLIN A.F.B SCREW NO.	0 Per Bracket
4	GABLE(1) EDGEBEAM	150 x 50 x 1.0mm thick Colorbond Beam
5	GABLE(1) BRACE	150 x 50 x 1.0mm thick Colorbond Beam
6	GABLE(1) RAFTER	150 x 50 x 1.0mm thick Colorbond Beam
7	GABLE(1) POST	89x89 or 90x90 SHS 2mm thk
8	FRAMING SCREW	Screw SD Hex C4 12-14 x 20mm Coloured
9	GABLE BRKT SCREW No.	12 Per Bracket
10	GABLE COLLAR TIE BRKT SCREW No.	12 Per Bracket
11	GABLE APEX BRKT SCREW No.	8 Per Bracket-Rafter, 8 Per Bracket-Bracket
12	POST BRKT SCREW No.	6 Per Bracket-Post, 6 Per Bracket-Beam
13	POST BASE SCREW No.	8 Per Base
14	ANCHOR BOLTS (4 PER BASE)	ExcalibrScrew Bolt M12x100
15	ROOF CLADDING	Corrugated BMT 0.42, CB
16	ROOF CLADDING FASTENERS	6x50 RZ SDS Hhead CB (5 per sheet per purlin row)
17	ROOF COLOUR	Pale Eucalypt
18	DOWNPIPE COLOUR	Pale Eucalypt
19	GUTTER COLOUR	Pale Eucalypt
20	BARGE COLOUR	Pale Eucalypt
21	ROOF BEAM COLOUR	Paperbark
22	POST COLOUR	Paperbark

PROJECT DESIGN CRITERIA

Roof Live Load	0.25 kPa
Roof Dead Load	0.10 kPa
Wind Class	N2
Seismic Zone	4
Soil Safe Bearing Capacity	100 kPa
Importance Level	2
Foot Traffic	No



PROJECT BY
FDB Launceston (Patios)
03 6334 5535
FOR
Travis Gray
AT
**87 King Street
Westbury**

NORTHERN CONSULTING
engineers

Civil & Structural Engineers
50 Punari Street
Currajong, Qld 4812
Fax: 07 4725 5850
Email: design@nceng.com.au
ABN 341 008 173 56

Registered Chartered Professional Engineer
Registered Professional Engineer (Civil & Structural) QLD
Registered Certifying Engineer (Structural) N.T.
Registered Engineer - (Civil) VIC
Registered Engineer - (Civil) TAS

Regn. No. 2558980
Regn. No. 9985
Regn. No. 116373ES
Regn. No. PE0002216
Regn. No. CC5648M

Mr Timothy Roy Messer BE MIEAust RPEQ

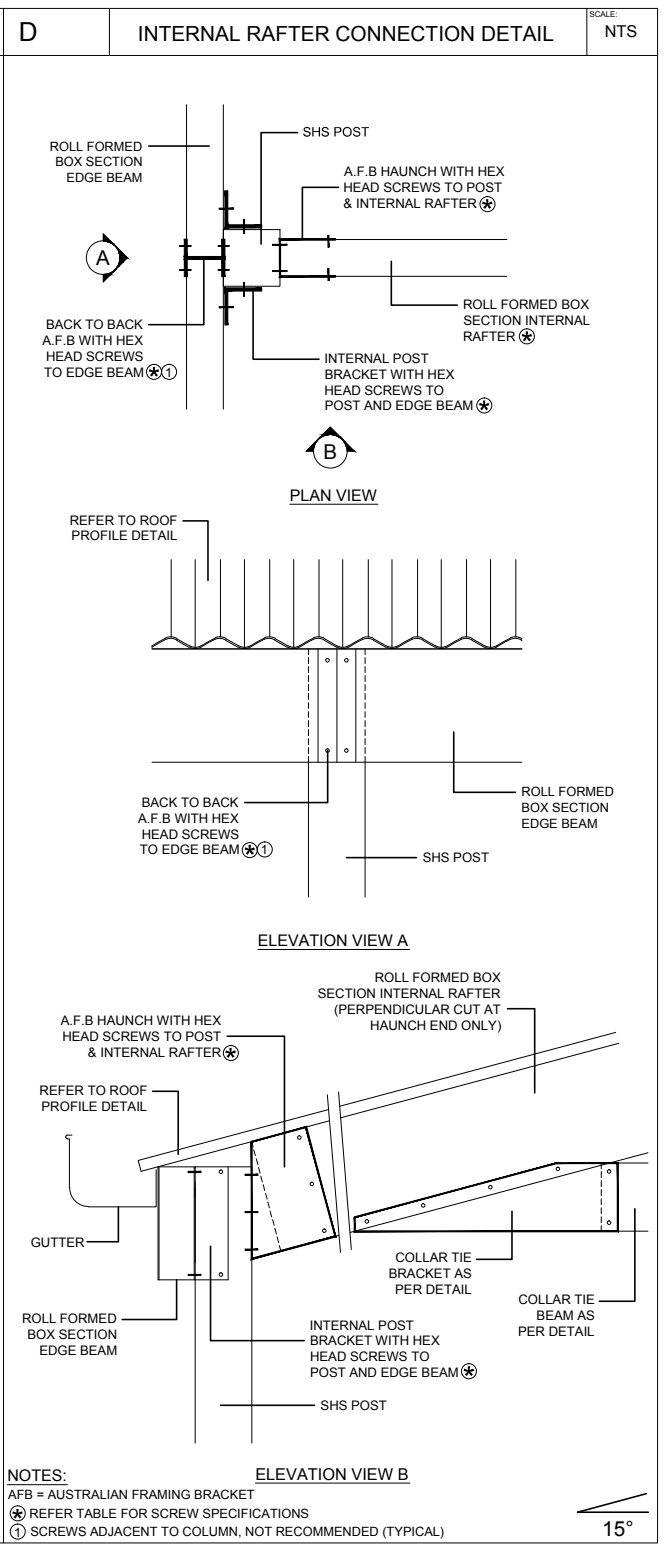
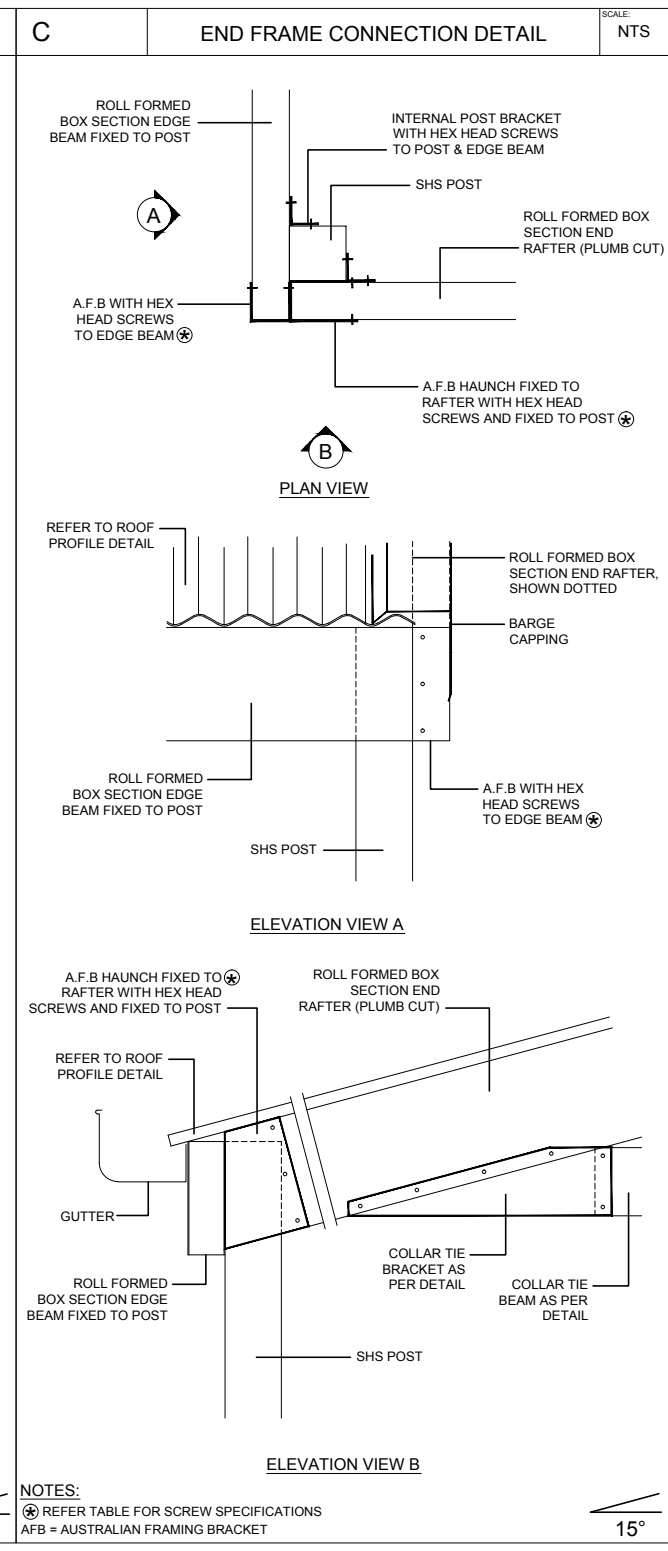
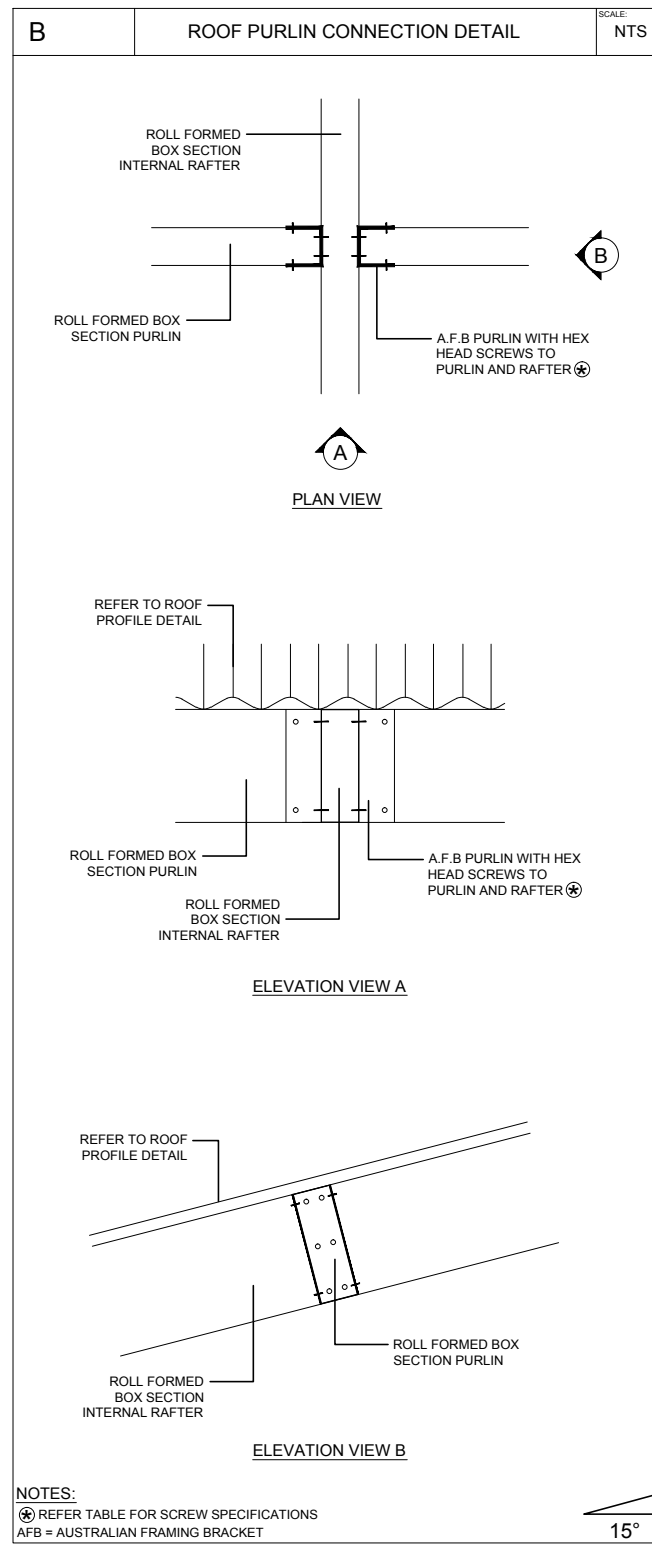
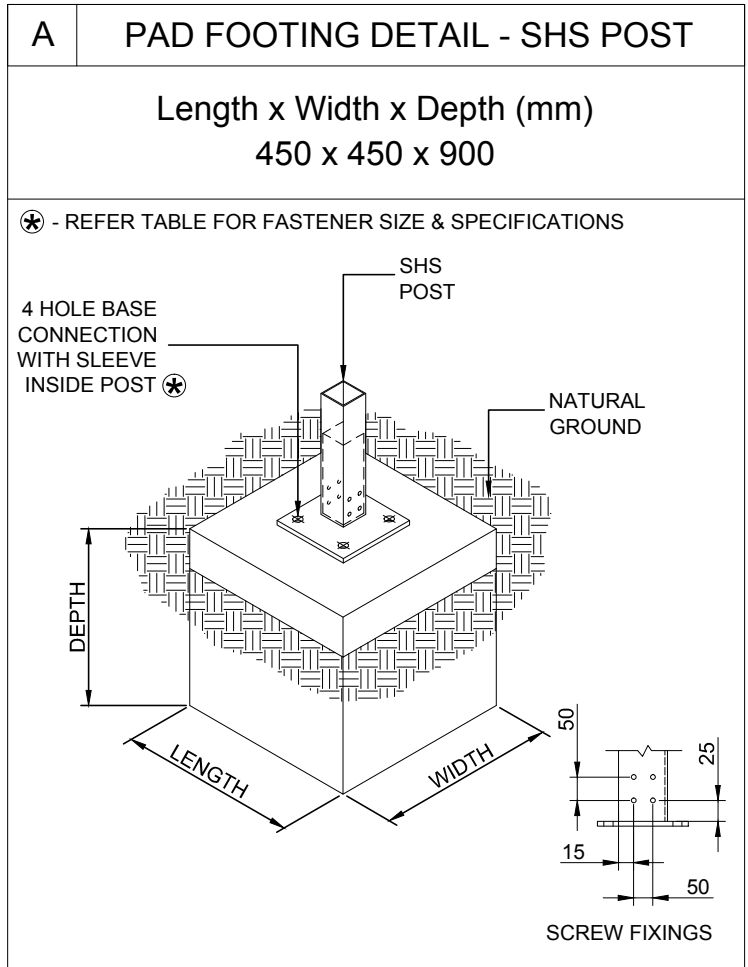
Signature *T. Messer*

Date14/11/2025.....

Registered on the NPER in the areas of practice
of Civil & Structural National Professional
Engineers Register

DRAWN	FDB
CHECKED	N/A
DATE	14/11/2025
JOB NO.	FDFDLC100162

SHEET
3
5



PROJECT BY
FDB Launceston (Patios)
03 6334 5535

FOR
Travis Gray

AT
87 King Street
Westbury

NORTHERN CONSULTING engineers

Civil & Structural Engineers
50 Punari Street
Currajok, Qld 4812
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Signature *T. Messer*

Date 14/11/2025

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DRAWN FDB

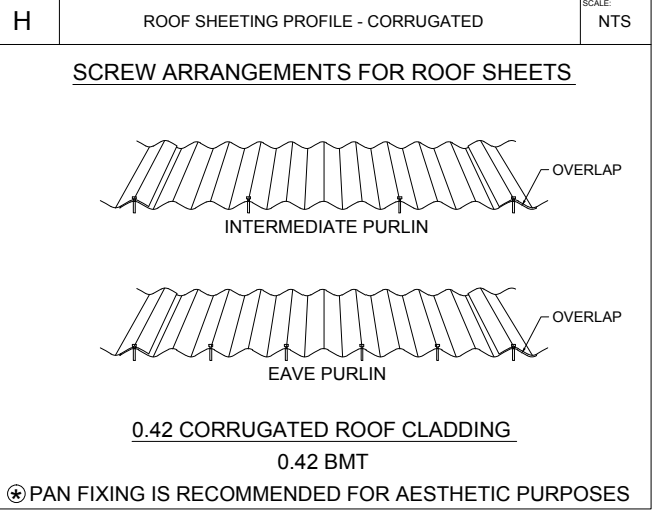
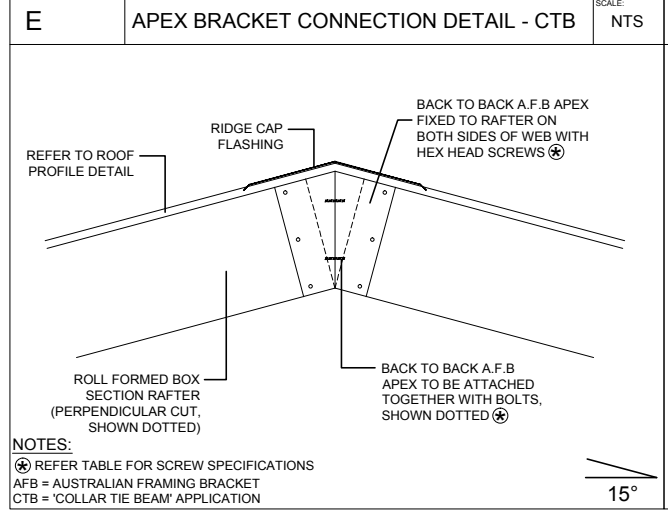
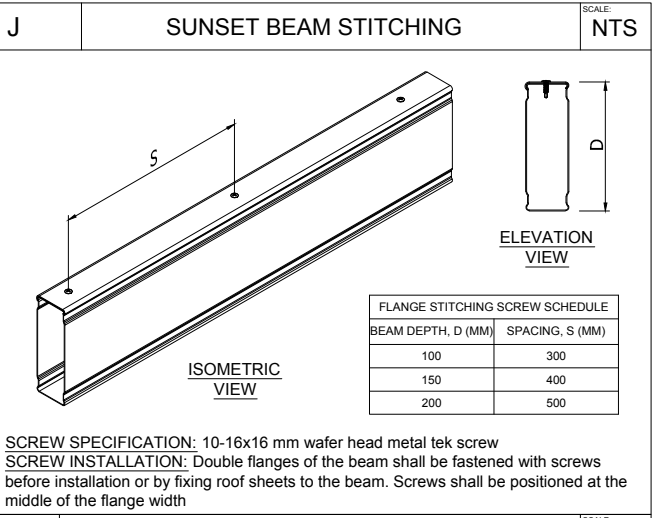
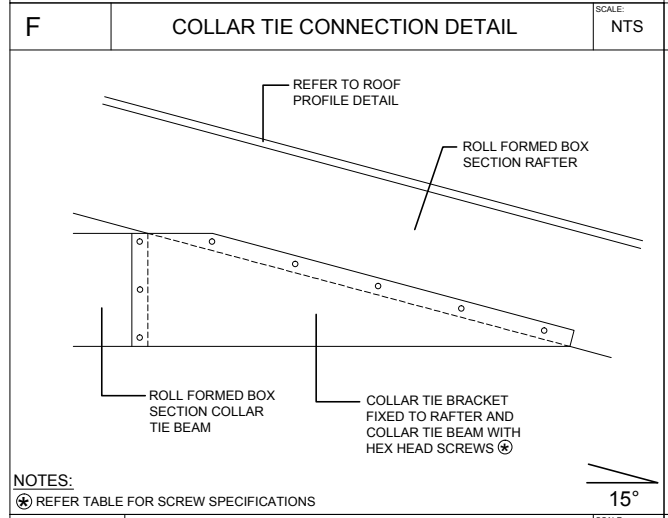
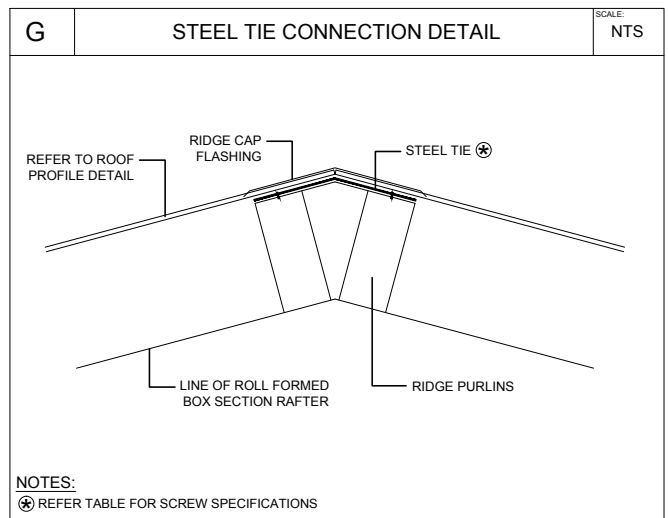
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DATE 14/11/2025

JOB NO. FDFDLC100162

SHEET 4

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PROJECT BY
FDB Launceston (Patios)
 03 6334 5535
 FOR
Travis Gray
 AT
 87 King Street
 Westbury

NORTHERN CONSULTING engineers

Civil & Structural Engineers
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 Regn. No. CC5648M

Mr Timothy Roy Messer BE MIEAust RPEQ

Signature *T. Messer*

Date 14/11/2025

Registered on the NPER in the areas of practice
 of Civil & Structural National Professional
 Engineers Register

DRAWN	FDB
CHECKED	N/A
DATE	14/11/2025
JOB NO.	FDFDLC100162

SHEET

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5

CERTIFICATE OF QUALIFIED PERSON-ASSESSABLE ITEM

Section 321

To: Owner/Agent
 Address
 Suburb/Postcode

Form **55**

Qualified person details:

Qualified Person:
Address: Phone No:
 Fax No:
Licence No: Email Address:

Qualifications and insurance details:

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Speciality area of expertise:

(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of Work:

Address: Lot No:
 Certificate of title No:
The assessable item related to this certificate:
(description of the assessable item being certified)
Assessable item includes -
- a material;
- a design
- a form of construction
- a document
- testing of a component, building system or plumbing system
- an inspection, or assessment, performed

Certificate Details:

Certificate type: *description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)*

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)

Building work, plumbing work or plumbing installation or demolition work :
OR
a building, temporary structure or plumbing installation :



In Issuing this certificate the following matters are relevant -

Documents:

'FBHS Pty Ltd' Structural Design Drawing (5 in total)
FDFDLC100162

Relevant Calculations:

Relevant calculations:

References:

NCC 2022, AS/NZ4600-2018,
AS1170, AS1170.0, AS1170.1, AS1170.2, AS1170.3, AS1170.4,
AS2870-2011, AS3600-2018, AS5216-2021

Substance Of Certificate: (what it is that is being certified)

Structure plus foundation.

Scope and/or Limitations

Vu (Limit State Design) < or = 40 m/s.

I certify the matters described in this certificate.

Qualified Person:

Signed: 

Mr Timothy Roy Messer

Certificate No:

CC5648M

Date:

14/11/2025

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

To : Owner Name
 Address
 Suburb/postcode

Form **35**

Designer Details:

Name: Category: **Structural & Building Designer**
 Business name:
 Business address: Phone No:
 Fax No:
 Licence No: Email Address:

Details of the proposed work:

Owner/Applicant Designer's project reference No.
 Address: Lot No:

Type of work : **Building work** **Plumbing work** (X all applicable)

Description of work :

Steel Portal Frame Structure 7 m Span x 8 m O/A length x 2.4 m eaves
 height building, consisting of 3 bays at 4 m x N/A m Left Leanto span
 xN/A m Right leanto span

(new building / alteration / addition / repair / removal / re-erection
 water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions) : (X all applicable certificates)

Certificate Type :	Certificate	Responsible Practitioner
	<input checked="" type="checkbox"/> Building design	Architect or Building Services Designer
	<input checked="" type="checkbox"/> Structural design	Structural Engineer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Services Designer
	<input type="checkbox"/> Plumbing design	Plumber
	<input type="checkbox"/> Other (specify)	

Deemed-to-Satisfy : Performance Solution : (X the appropriate box)

Other details :

Design documents provided:

The following documents are provided with this Certificate -

Document description :

Drawing numbers : 1 to 5	Prepared by : FBHS Pty Ltd	Date : 14/11/2025
Schedules :	Prepared by :	Date :
Specifications :	Prepared by :	Date :
Computations :	Prepared by :	Date :
Performance solution proposals :	Prepared by :	Date :
Test reports :	Prepared by :	Date :

Standards, codes or guidelines relied on in design process :

NCC 2022, AS/NZ4600-2018
AS1170, AS1170.0, AS1170.1, AS1170.2, AS1170.3, AS1170.4
AS2870-2011, AS3600-2018, AS5216-2021
NCC Building Classification = Class 10a

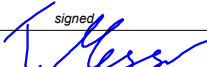
Any other relevant documentation :

Attribution as designer:

I **Tim Messer** am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

Designer: Name : (print)
Tim Messer signed
 Date
14/11/2025

Licence No: **CC5648M (Structural & Building Designer)**

Assessment of Certificate Works : (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- The works will not damage or interfere with TasWater's works
- The works will not adversely affect TasWater's operations
- The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater

Certification :

I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

Designer:

Name : (print)

signed

Date

STRUCTURAL GENERAL NOTES

1.0 General

- 1.1 These drawings are
 - a) Jointly owned by Steeline and Venn Engineering Pty Ltd
 - b) Provided for the sole purpose of obtaining building approval and guiding construction of a single building at the job address shown in the title block
 - c) Prohibited to be used for any other purpose without written authorisation from Steeline and Venn Engineering Pty Ltd.
 - d) Only valid if signed by the engineer and must not be altered in any way without signed approval from the engineer.
 - e) Produced to scale but dimensions shall not be obtained by measuring the drawings. All dimensions are in millimeters unless stated otherwise.
- 1.2 The engineer accepts no liability or responsibility for the contents of drawings that are invalid.
- 1.3 The word 'the engineer' used in these notes refers to an employee or nominated representative of Venn Engineering Pty Ltd.
- 1.4 The engineer is not the project manager or site supervisor for this project. It is the responsibility of the project manager or site supervisor in charge to ensure that the non-structural requirements of the Governing Building Code are considered and appropriately designed. This includes, but not limited to, fire & bushfire design, access requirements, future roof access requirements, lighting, glazing and electrical design, etc.

2.0 Structural Design

- 2.1 The structural framing components detailed in these drawings have been designed in accordance with the following documents for the design criteria detailed in these notes

Governing Building Code Loading Standards	2022 National Construction Code – Building Code of Australia Volume 2 and 2022 Housing Provisions Standard AS/NZS 1170.0:2002(+A5) AS/NZS 1170.1:2002(+A2) AS/NZS 1170.2:2021
Cold formed Steel member standard	AS/NZS 4600:2018
- 2.2 These drawings are also the limit of the Structural Design, any requirements for additional structural design of other items included in the project are specifically excluded if not shown on these drawings. This includes, but not limited to, requirements for additional loads that aren't specified including flood design loads, additional roof loads from solar panels, retaining walls required on site, driveway design etc.
- 2.3 These structural drawings and specifications represent the finished structure. The building is not considered complete until the installation of all components and details shown herein are installed according to the drawings.
- 2.4 No alterations are to be made to this structure without written approval of the engineer. This includes, but not limited to, modification to the plans and/or specifications, be the installation of additional openings, increased roof loads, skylight roof sheets or removal of cladding. If changes are made without written approval, such changes shall the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their full responsibility to replace or repair the condition of the building as directed by the engineer.

3.0 Design Criteria

Building class.....	10a
Building Importance level.....	2
Wind region.....	A4
Terrain category.....	2.68
Topographic multiplier.....	1
Shielding multiplier.....	0.91
Ultimate design wind speed.....	35.0 m/s
Snow load.....	0.00 kPa
Slab imposed load.....	2.5 kPa or 9kN applied over 0.3x0.3m area (light vehicles)
Allowable bearing capacity of foundation supporting footings.....	100 kPa
Allowable bearing capacity of foundation supporting slab.....	50 kPa
Allowable skin friction of foundation.....	25 kPa
Soil Type.....	Non-aggressive (not saline or acid sulfate)

4.0 Installation Building Contractor Responsibilities

- 4.1 The contractor shall verify and confirm all site conditions and dimensions. Any discrepancies between drawings and site conditions shall be referred to the engineer for decision before proceeding with the work.
- 4.2 All workmanship and materials are to be in accordance with the Governing Building Code including all relevant Australian Standards and local statutory authorities except where varied by the contract documents.
- 4.3 The contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part is overstressed under construction activities. They shall provide all temporary bracing, shoring or other means to avoid excessive stresses and to hold structural elements in place during erection. These temporary provisions shall remain in place until sufficient permanent members are erected to ensure the safety of partially erected structures. The contractor is responsible for meeting all laws regulating the erection of steel buildings including, but not limited to, Safe Work Australia guidelines.
- 4.4 The contractor shall be responsible for the location of all services in the vicinity of the works. Any services shown are provided for information only. The contractor shall confirm the location of all services prior to commencing and shall be responsible for the repair of any damage caused to services, as well as any loss incurred because of the damage to any service.

5.0 Foundation

- 5.1 The bearing capacity of the foundation supporting the footings and slab shall be confirmed before any concrete is placed.
- 5.2 No earth or debris is to fall into the footings or piers before and during placing of concrete.
- 5.3 All footings shall be located centrally under walls and columns unless noted otherwise.
- 5.4 Concrete embedment depths do not apply to locations where any uncompacted fill or disturbed ground exists or where walls of the excavation will not stand without support. Request further advice from the engineer in these circumstances.
- 5.5 Fill used for the support of a slab on ground shall be controlled fill or rolled fill as in accordance with clause 6.4.2 of AS 2870-2011.
- 5.6 Slabs less than 100sq.m in plan area are suitable for AS 2870-2011 site classes A, S & M. For larger slabs or for site classes M-D, H1, H1-D, H2, H2-D, E & E-D, the slab may experience cracking more than is considered normally acceptable. The cracking is considered of aesthetic concern only and should not effect the structural performance of the slab or shed. If this is not desired, contact the engineer for further advice.

6.0 Concrete

- 6.1 Concrete placement and workmanship shall be in accordance with AS 3600-2018 & AS 2870-2011.
- 6.2 Concrete shall be
 - a) N25 with slump of 100 mm in accordance with AS 1379-2007, with 20 mm maximum nominal aggregate size and no admixtures.
 - b) consolidated by mechanical vibration.
 - c) Cured for a minimum of 7 days using continuous ponding with potable water.
- 6.3 No holes, chases or embedment of pipes other than those shown on the drawings shall be made in concrete members without prior approval of the engineer.

7.0 Reinforcement

- 7.1 Reinforcement shall comply with AS/NZ 4671-2019.
- 7.2 Reinforcement is represented diagrammatically and not necessarily shown in true projection.
- 7.3 Welding of reinforcement shall not be permitted without the approval of the engineer.
- 7.4 All reinforcement shall be securely supported in its correct position ensuring the correct cover during placing of concrete by approved bar chairs, spacers or support bars. Approved chairs include stainless steel or plastic bar chairs for bottom reinforcement and plastic tipped wire bar chairs for top reinforcement. All chairs to be spaced at maximum of 750mm centres.
- 7.5 Cover to reinforcement shall be:
 - a) 50mm for surfaces of concrete in contact with the ground;
 - b) 30mm for top surfaces of slabs fully enclosed by the building without open bays or
 - c) 60mm for top surfaces of slabs more than 1 km from the coastline with open bays.
 - d) For buildings with open bays within 1km of the coast, contact the engineer for cover and concrete grade requirements.
- 7.6 Reinforcement shall be lapped 500mm for 12mmØ bars and 800mm for 16mmØ bars.
- 7.7 Mesh reinforcement shall be lapped such that the two outermost wires of one sheet overlap the two outermost wires of the other sheet by 25 mm.
- 7.8 Hooks, bends and cogs to be in accordance with AS 3600-2018 unless noted otherwise on drawings.

8.0 Anchor Bolts

- 8.1 All anchors bolts shall be installed in accordance with the manufacturer's installation instructions.
- 8.2 Drill holes using a percussion drill (coring not permitted) to the correct hole diameter and depth as specified in the drawings.
- 8.3 Thoroughly clean and blow the dust out of the holes using the cleaning accessories prescribed by the manufacturer's instructions.
- 8.4 Substitution of anchors bolts and chemical epoxy adhesive is not permitted unless written confirmation from the engineer is provided.
- 8.5 For chemical anchors, ensure load is not applied to the anchors whilst epoxy adhesive is curing.

9.0 Light Gauge Cold-formed Steel

- 9.1 All light gauge cold-formed steel shall comply with AS 1397-2021 and be the following grades

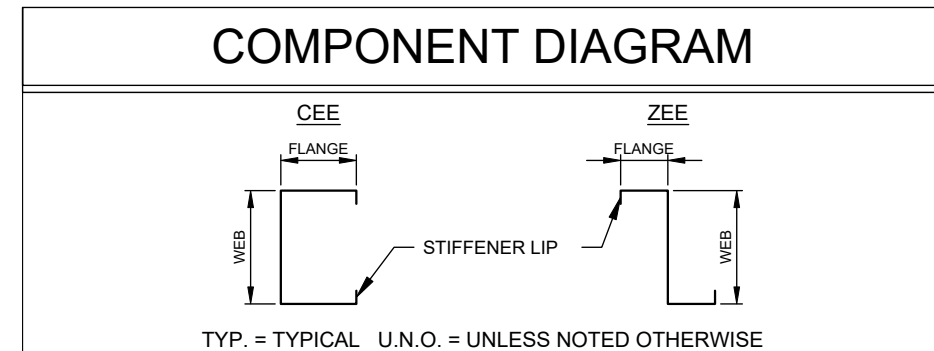
Thickness(mm)	Steel grade (yield stress, MPa)	Protective coating (g/m2)
BMT ≤ 1.0mm	G550	Z350
1.0mm < BMT < 1.5mm	G500	Z350
1.5mm ≤ BMT ≤ 3.0mm	G450	Z350
- 9.2 Welding of light gauge cold-formed steel shall not be permitted.
- 9.3 Column and rafter members shall not be drilled or notched without prior approval of the engineer.
- 9.4 Round holes may be drilled through any girt or purlin member within the middle third of the depth of that member and not within 600mm of member end unless noted otherwise.
- 9.5 All bolts used to connect light gauge cold-formed steel members shall be
 - a) Zinc coated M12 (min.) grade 4.6 snug tightened complying to AS 1111.1-2015 & AS 1112.3-2015 unless noted otherwise.
 - b) Spaced no less than 3 bolt diameters between centres.
 - c) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
- 9.6 All screws used to connect light gauge cold formed steel members (excluding sheeting) shall be
 - a) 10g (min.) self-drilling screws complying with AS 3566.1-2002.
 - b) Corrosion resistance class 4 in accordance with AS 3566.2-2002 for buildings within 1 km from the coastline with open bays or class 3 otherwise.
 - c) Spaced no less than 3 bolt diameters between centres.
 - d) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.

10.0 Roof & Wall Sheeting

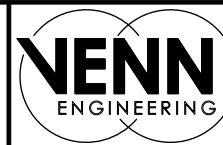
- 10.1 Roof & wall sheeting shall comply with AS 1397-2018 and have suitable corrosion protection complying with Table 7.2.2a of the 2022 Housing Provisions Standard.
- 10.2 During construction and maintenance, no foot traffic shall occur within end spans of sheeting, foot traffic shall occur
 - a) Evenly across at least two ribs for corrugated profiled sheeting or
 - b) In the pans for pan-type profiled sheeting.
- 10.3 Any roof skylights shall be approved by the engineer
- 10.4 Safety mesh shall be installed in accordance with the building code

11.0 Door & Window Components

- 11.1 Wind-locked roller doors are assumed to remain in-place and resist the ultimate limit state wind loading except for in cyclonic regions
- 11.2 Non-wind-locked roller doors are assumed to have failed at the ultimate limit state wind loading
- 11.3 Personal access doors shall be rated for the wind loading parameters stated in the design criteria (see section 3.0)
- 11.4 All windows shall be in accordance with AS 1288-2021 & AS 2047-2014(+A2) as appropriate for the wind loading parameters stated in the design criteria (see section 3.0)



REV	DATE	DESCRIPTION
A	08-10-2025	-

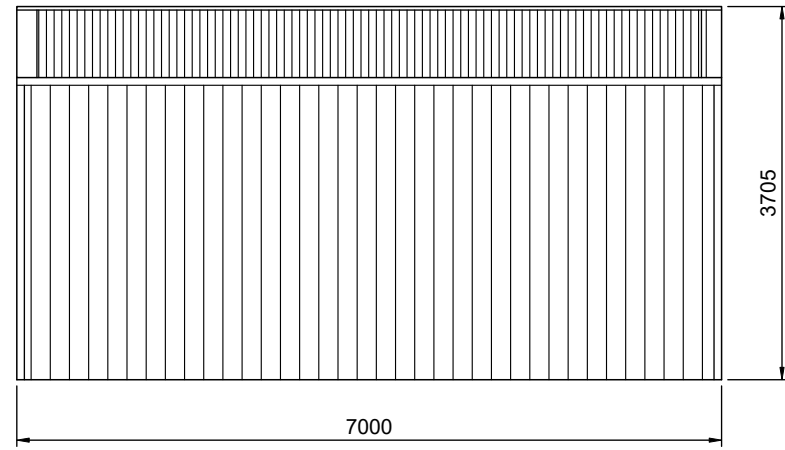


PO Box 3084
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ABN 39 626 802 257

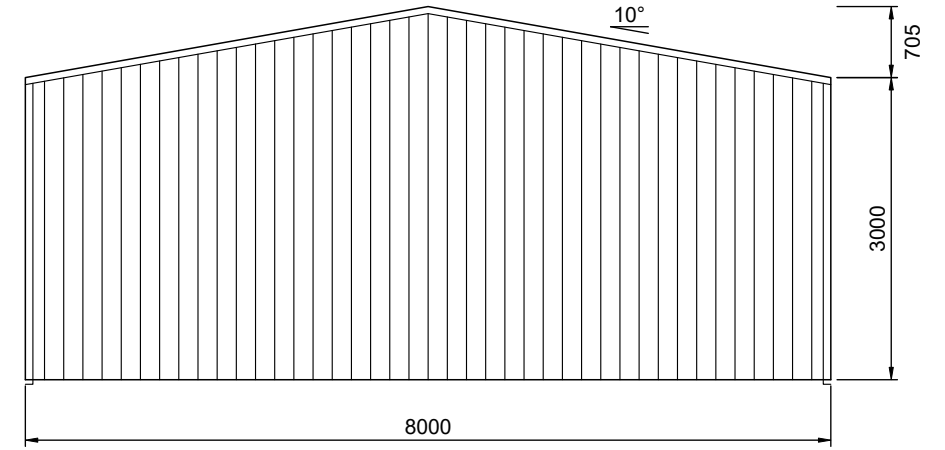
Signed Date 08-10-2025
Grant J Wood MIEAust CPEng NER RPEQ
Registered EA Chartered Professional Engineer (No. 2383009)
Registered Professional Engineer QLD (No. 14384)
Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
Registered Certifying Engineer (structural) NT (No. 306371ES)
Building Services Provider (Engineer Civil) TAS (No. 699339425)

Customer Name: Travis Gray
Site Address: 87 King St
Westbury,
TAS, 7303

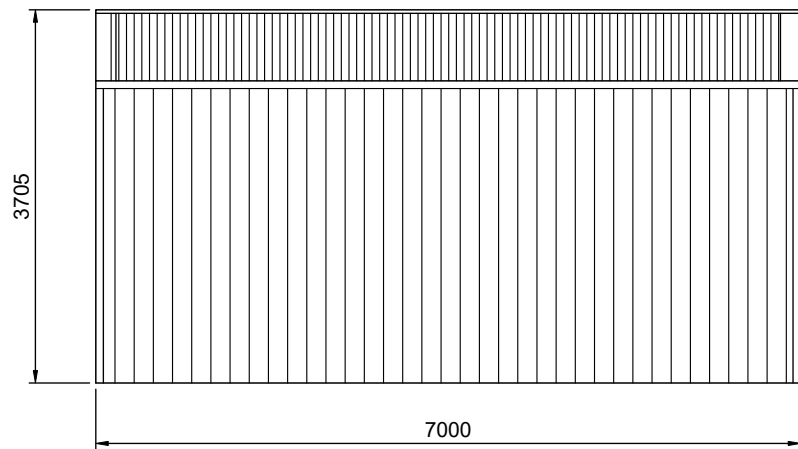
DATE 08-10-2025
JOB NO. LINV1017281604
SHEET 1 of 8



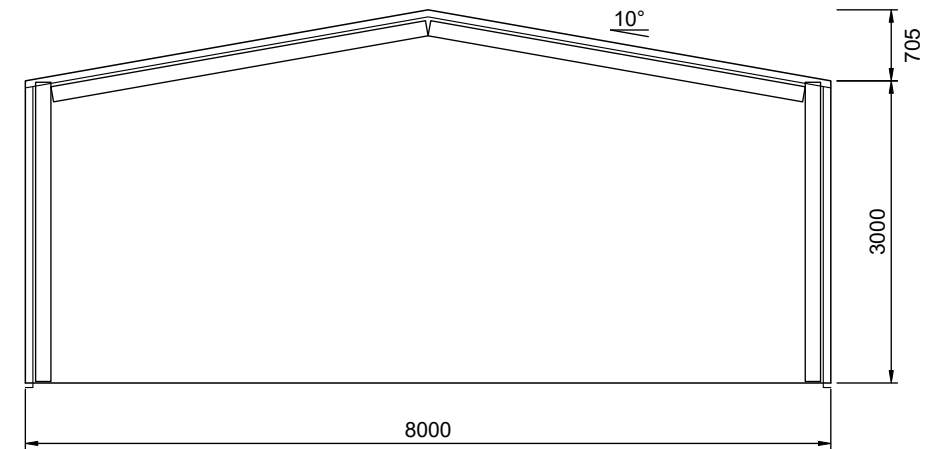
2 SIDEWALL B BUILDING ELEVATION
2 SCALE: 1:75



3 REAR BUILDING ELEVATION
2 SCALE: 1:75



1 SIDEWALL A BUILDING ELEVATION
2 SCALE: 1:75

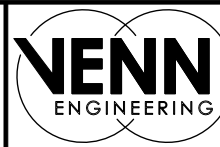


4 FRONT BUILDING ELEVATION
2 SCALE: 1:75

REV	DATE	DESCRIPTION
A	08-10-2025	-



ANOTHER
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DESIGNED BY
ACT BUILDING SYSTEMS

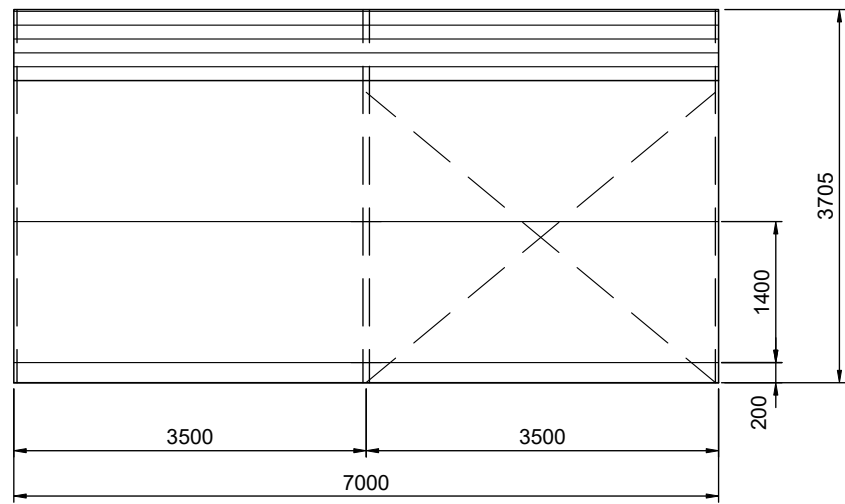


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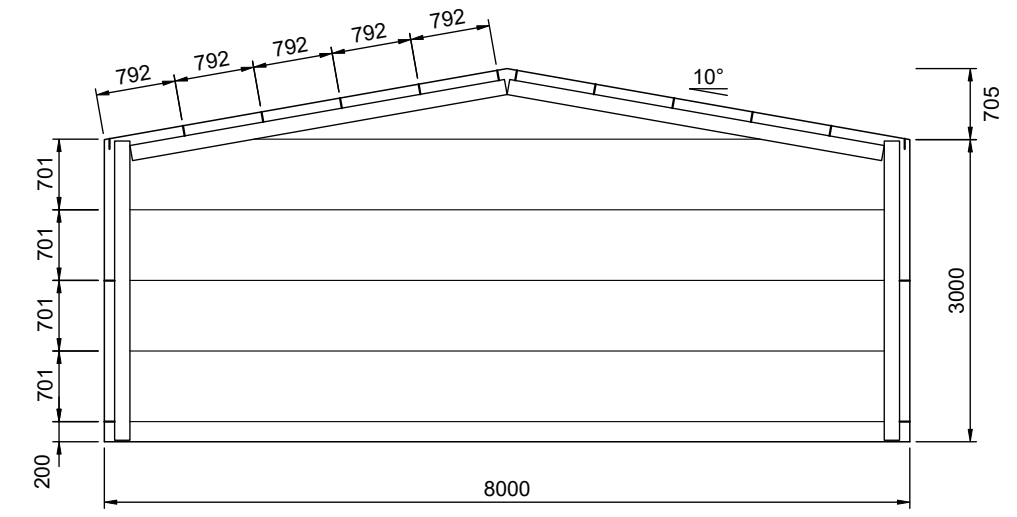
Customer Name: Travis Gray
Site Address: 87 King St
Westbury,
TAS, 7303

DATE 08-10-2025
JOB NO. LINV1017281604
SHEET 2 of 8



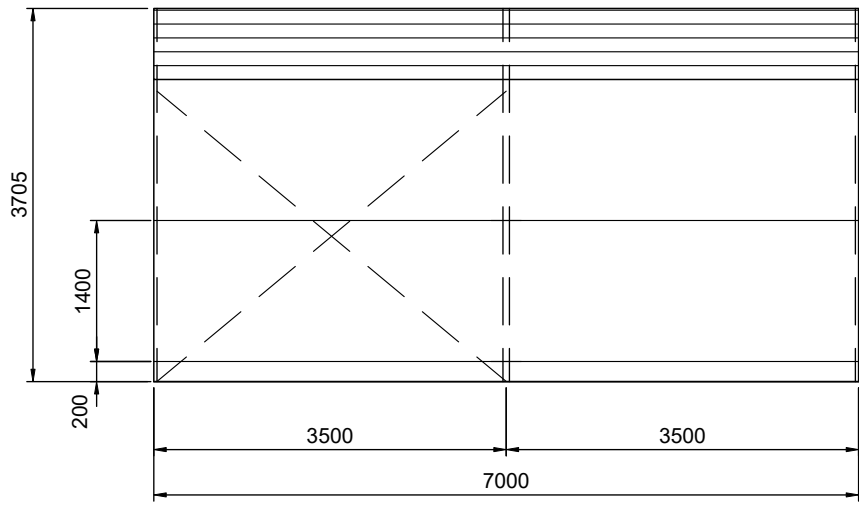
2 SIDEWALL B FRAMING ELEVATION

3 SCALE: 1:75



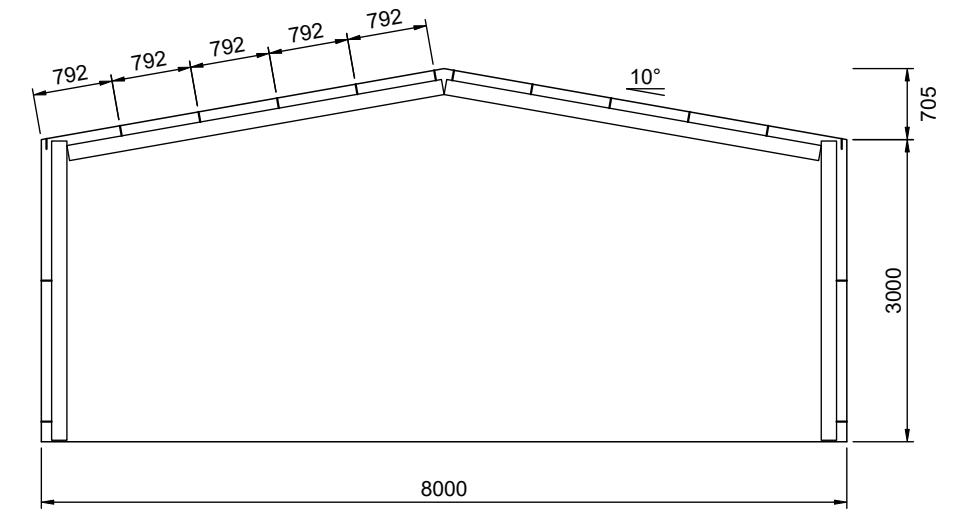
3 REAR FRAMING ELEVATION

3 SCALE: 1:75 FRAME #3



1 SIDEWALL A FRAMING ELEVATION

3 SCALE: 1:75



4 FRONT FRAMING ELEVATION

3 SCALE: 1:75 FRAME #1

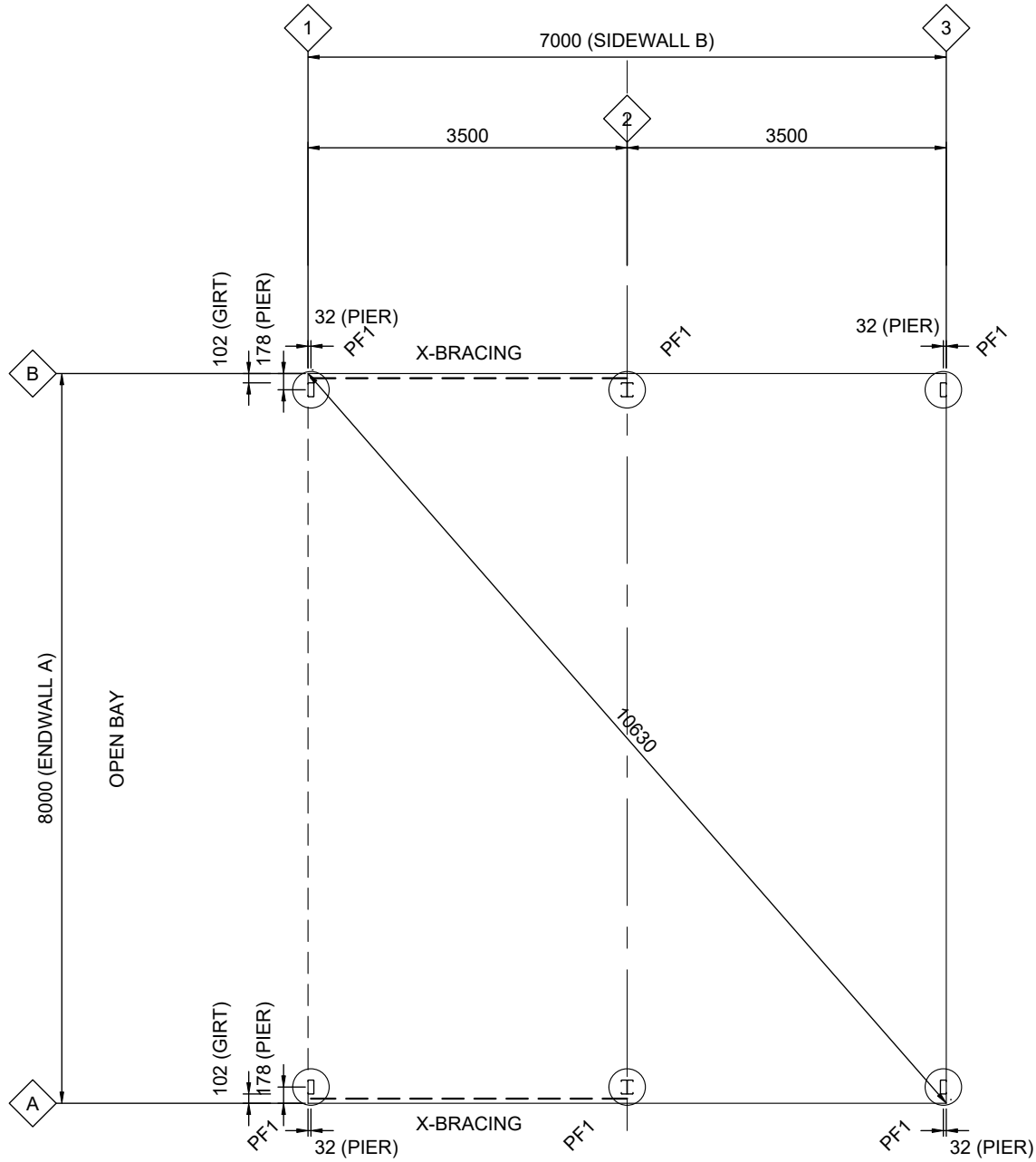
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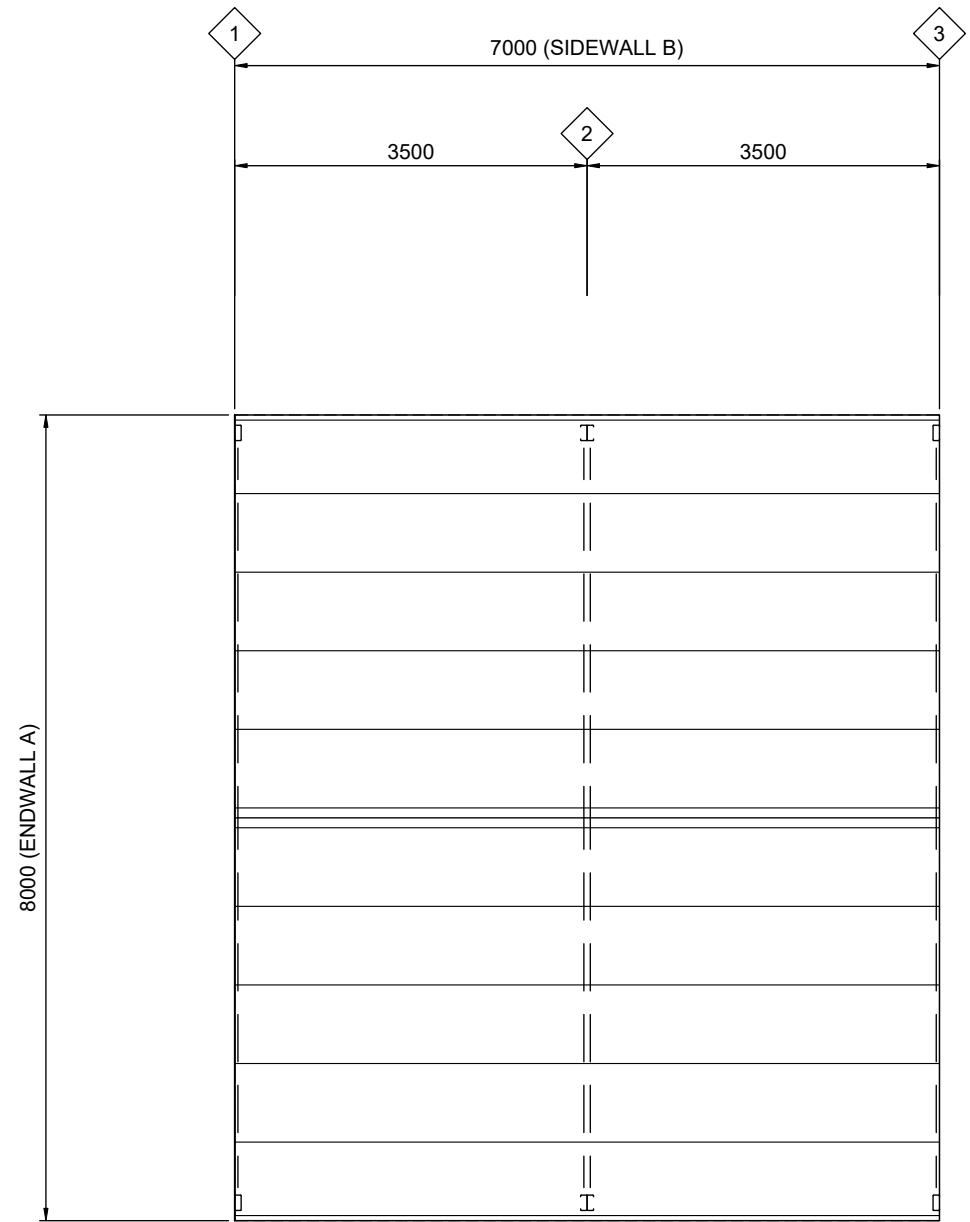
Signed *[Signature]* Date 08-10-2025
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 TAS, 7303

DATE 08-10-2025
 JOB NO. LINV1017281604
 SHEET 3 of 8

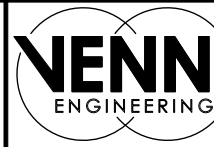


1 FOOTING/SLAB FLOOR PLAN
4 SCALE: 1:75 PF1 - 400Ø REINFORCED CONCRETE PIERS TO DETAIL



2 ROOF FRAMING PLAN
4 SCALE: 1:75
 ROOF SHEETING IS USED AS DIAPHRAGM TO BRACE THE BUILDING AND IS NOT TO BE CUT UNDER ANY CIRCUMSTANCES

REV	DATE	DESCRIPTION
A	08-10-2025	-

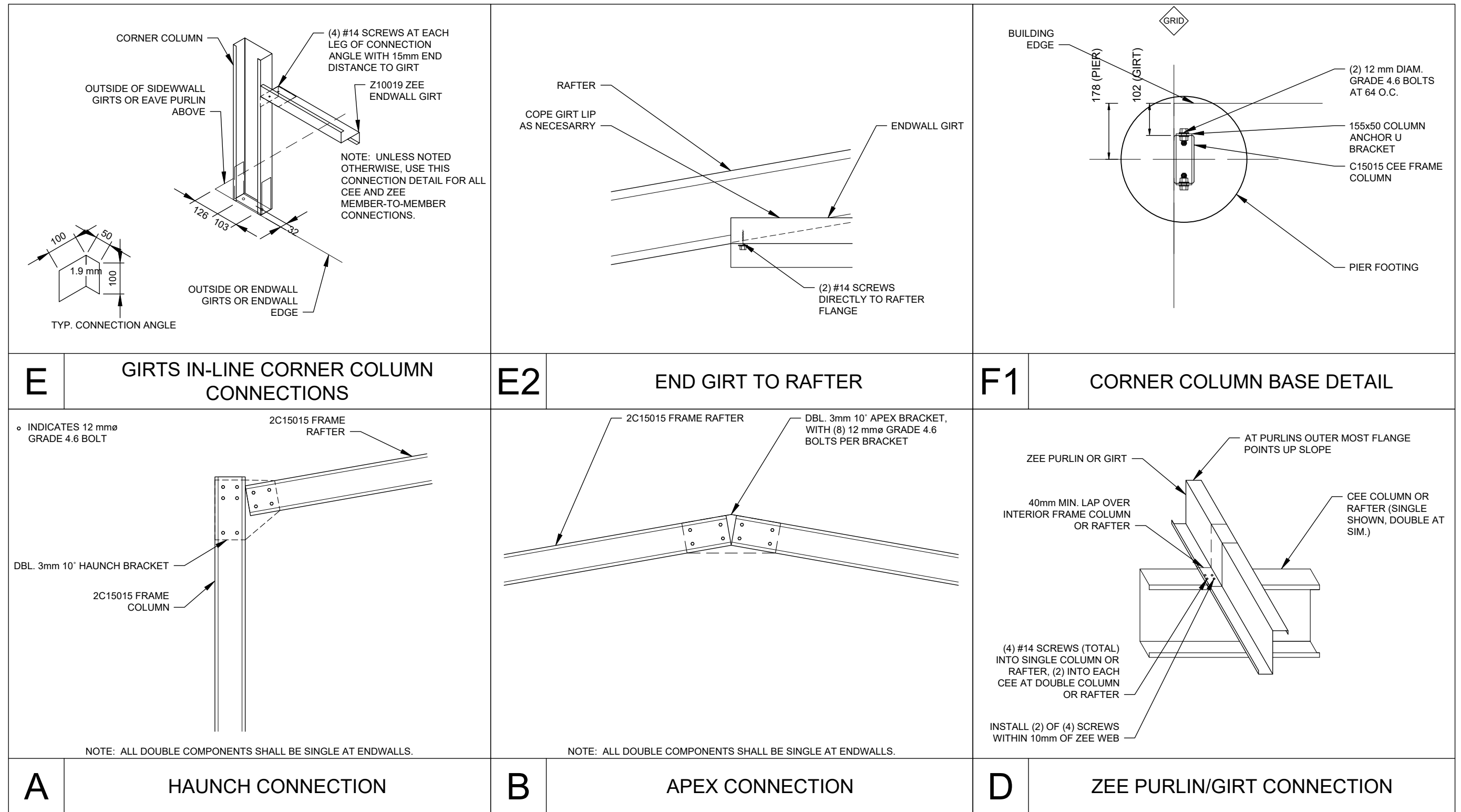


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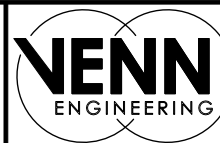
Customer Name: Travis Gray
 Site Address: 87 King St
 Westbury,
 TAS, 7303

DATE 08-10-2025
 JOB NO. LINV1017281604
 SHEET 4 of 8



DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
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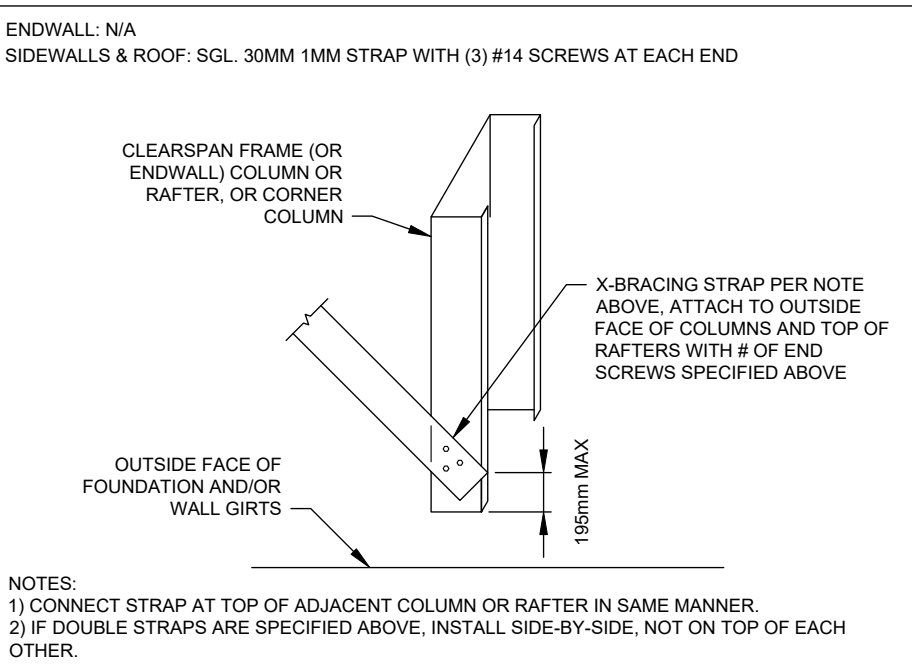
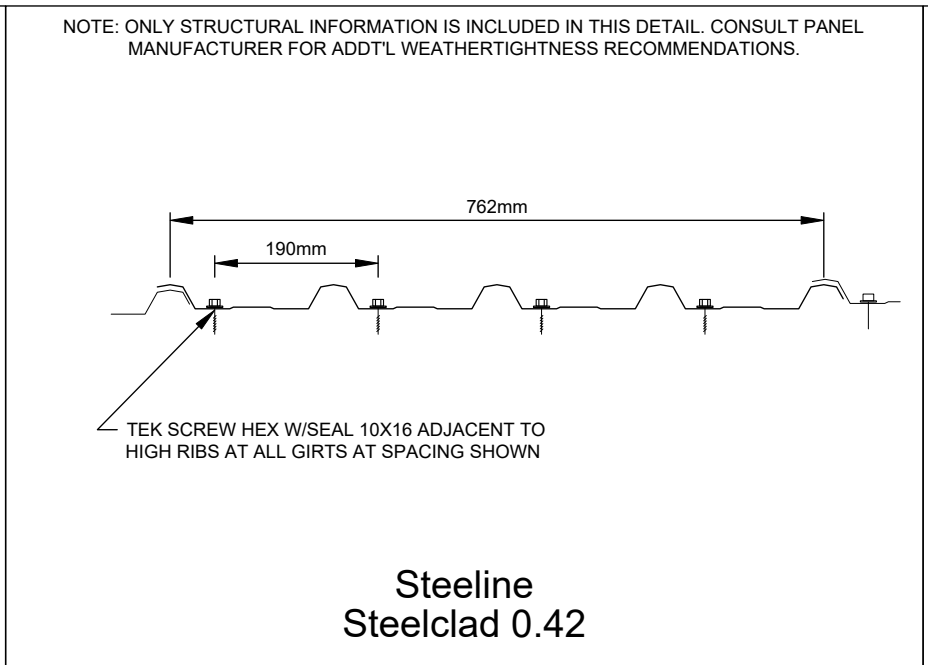
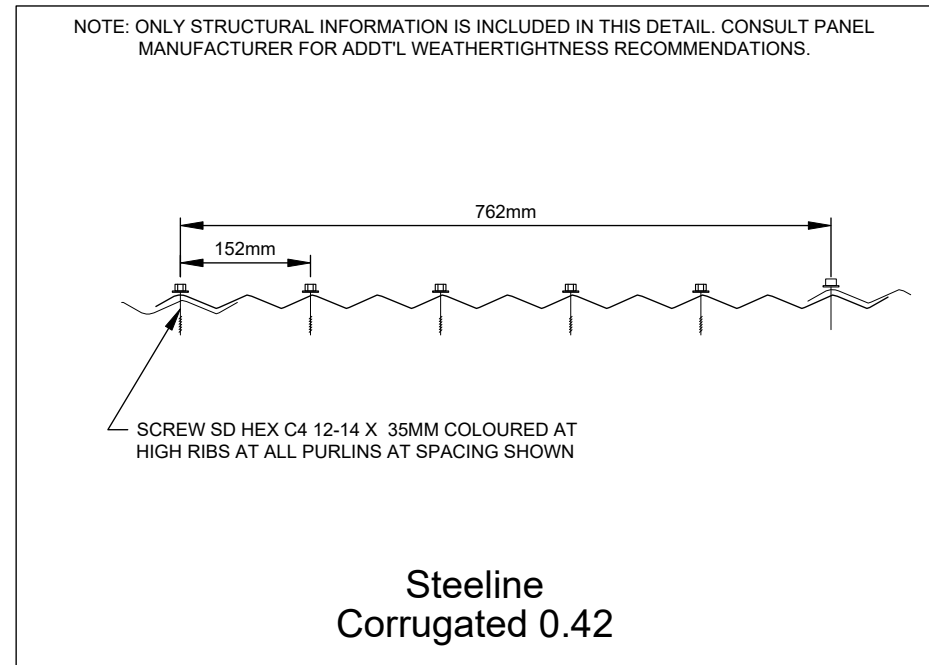


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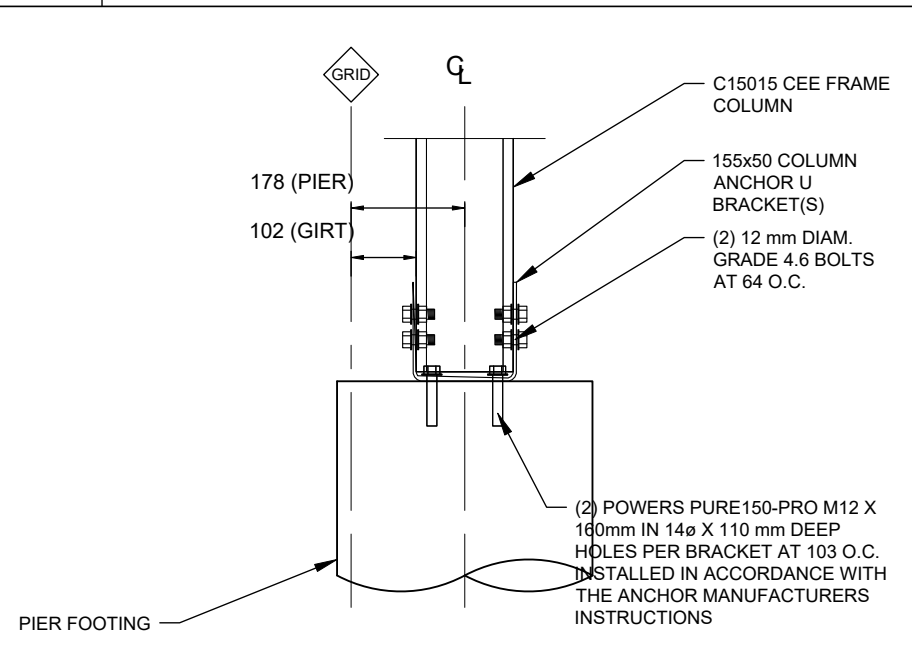
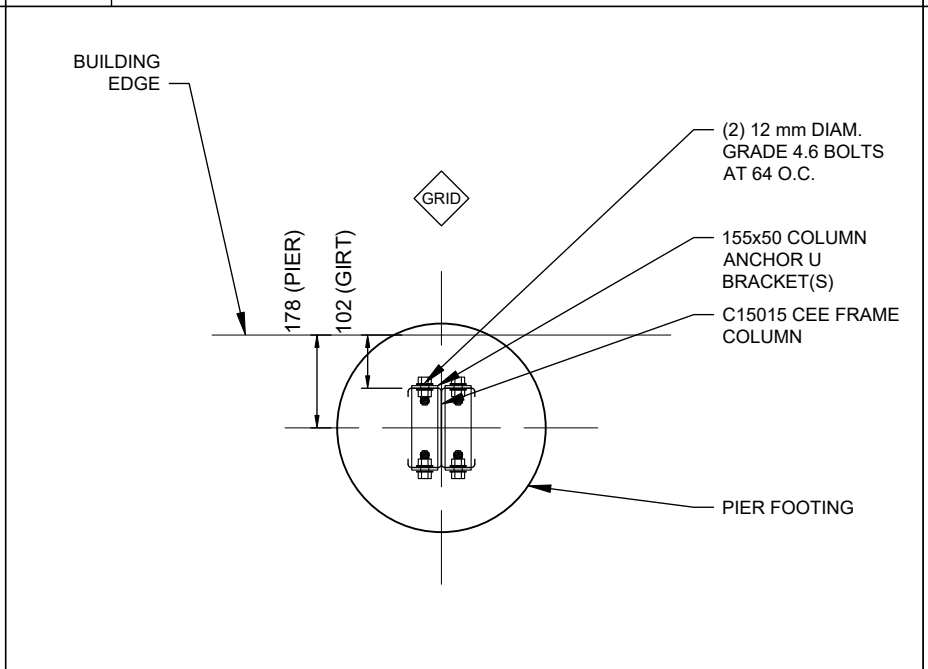
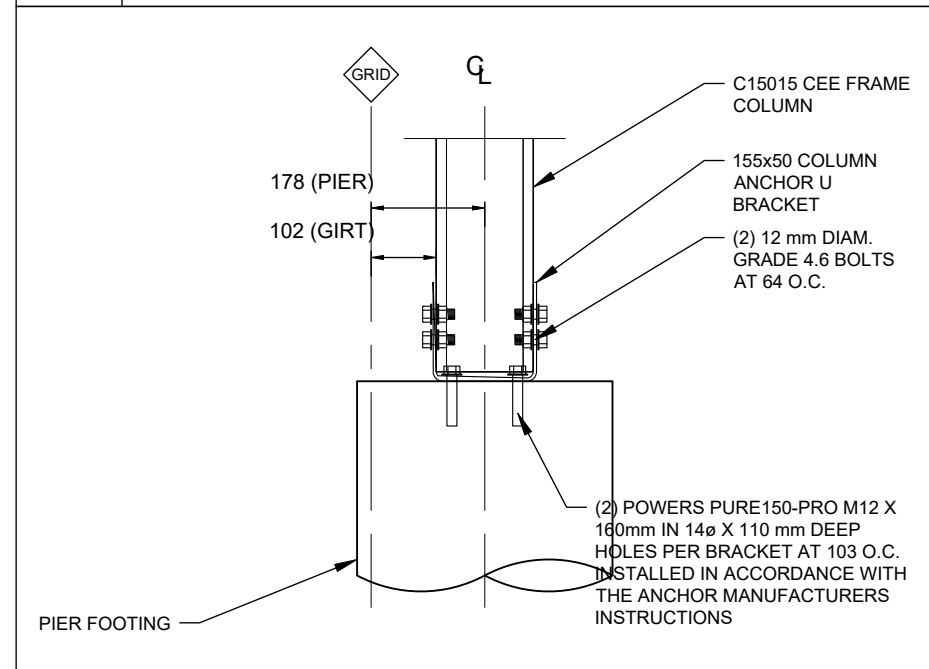
DATE 08-10-2025
JOB NO. LINV1017281604
SHEET 5 of 8



H ROOF SHEETING

I WALL SHEETING

M ROOF AND WALL X-BRACING CONNECTION



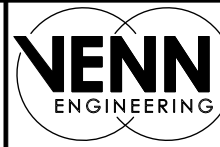
F2 CORNER COLUMN BASE DETAIL 2

F3 FRAME COLUMN BASE DETAIL

F4 FRAME COLUMN BASE DETAIL 2

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
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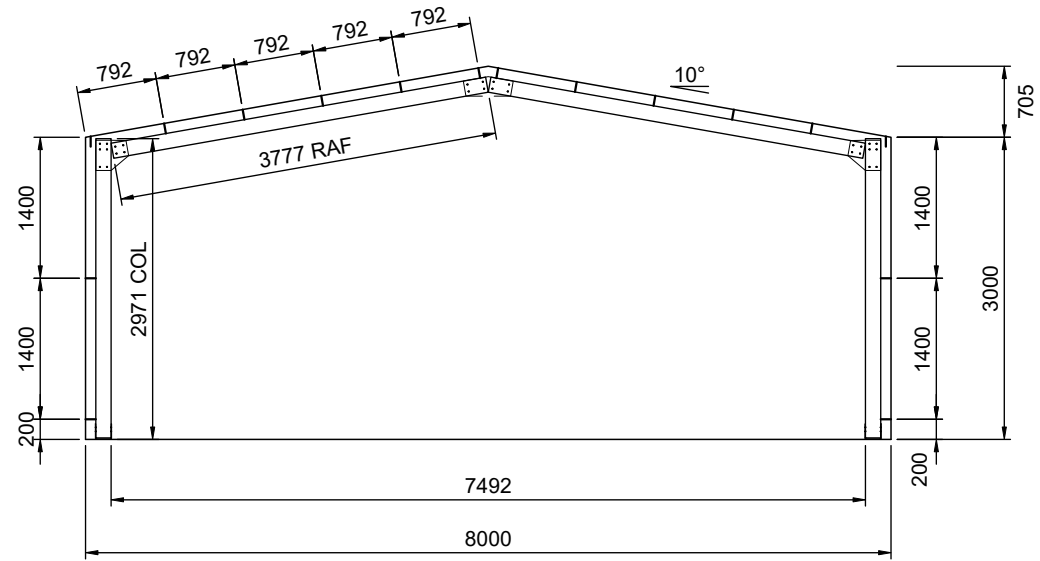


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SHEET 6 of 8

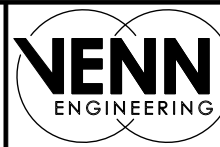


1 INTERNAL FRAMING ELEVATION
7 SCALE: 1:75 FRAME #2

	<p>ALL NUTS AND BOLTS TO HAVE WASHER OR FLANGED HEADS</p>	<table border="1"> <tr><td></td><td>PF1</td></tr> <tr><td>D</td><td>950mm</td></tr> <tr><td>Diameter</td><td>400mm</td></tr> </table>		PF1	D	950mm	Diameter	400mm
	PF1							
D	950mm							
Diameter	400mm							
<p>O EAVE PURLIN BRACKET</p>	<p>P BOLT OPTIONS</p>	<p>Y PIER DETAIL</p>						

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
A	08-10-2025	-



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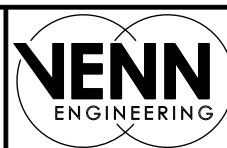
DATE 08-10-2025
JOB NO. LINV1017281604
SHEET 7 of 8

MEMBER SCHEDULE			
COMPONENT		TYPE	
CLEAR SPAN PORTAL (FRAME 2)	MEMBER	RAFTER	Double C15015
		COLUMN	Double C15015
		APEX BRACE	-
		KNEE BRACE	-
	BASE CONNECTION	BRACKET TYPE	Base cleat bolt down bracket BC.150
		ANCHOR BOLTS	(4) Powers Pure150-PRO M12 x 160mm
ENDWALL PORTAL (FRAMES 1, 3)	MEMBER	RAFTER	Single C15015
		COLUMN	Single C15015
		APEX BRACE	-
		KNEE BRACE	-
	BASE CONNECTION	BRACKET TYPE	Base cleat bolt down bracket BC.150
		ANCHOR BOLTS	(2) Powers Pure150-PRO M12 x 160mm
ROOF PURLINS		MEMBER	Single Z10010 @ 792mm centres
EAVE PURLIN		MEMBER	Single C10015
SIDEWALL GIRTS		MEMBER	Single Z10010 @ 1400mm centres
ENDWALL GIRTS		MEMBER	Single Z10019 @ 701mm centres
X-BRACING	STRAP		30mm x 1.0 strap

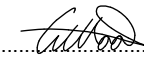
REV	DATE	DESCRIPTION
A	08-10-2025	-



ANOTHER
COLD FORMED BUILDING
DESIGNED BY
ACT BUILDING SYSTEMS



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THIRROUL NSW 2515
sheds@venn.engineering
ABN 39 626 802 257

Signed  Date 08-10-2025

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Building Services Provider (Engineer Civil) TAS (No. 69933425)

Customer Name: Travis Gray
Site Address: 87 King St
Westbury,
TAS, 7303

DATE 08-10-2025
JOB NO. LINV1017281604
SHEET 8 of 8

Generic Temporary Bracing Information

The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials

The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.

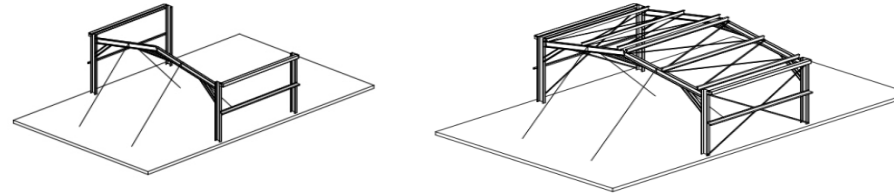


Fig 1. Frame First Temporary Bracing on First Rafter Installed Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground and then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.

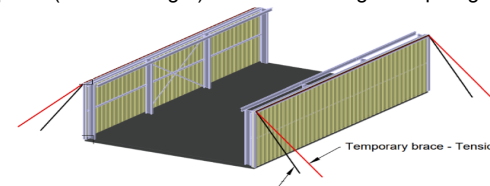


Fig 3. Tilt Up Method - Temporary Bracing

Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

Bracing Removal

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/> 'Construction work – steel erection. Information sheet', 2016.

<https://www.steel.org.au/> 'Structural steelwork fabrication and erection code of practice', 2014.

<https://www.standards.org.au/> AS/NZS 5131:2016 'Structural steelwork – Fabrication and erection.

Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: *Owner name*
 Address
 Suburb/postcode

Designer details:

Name: *Category:*
 Business name: *Phone No:*
 Business address:
 Fax No:
 Licence No: *Email address:*

Details of the proposed work:

Owner/Applicant *Designer's project reference No.*
Address: *Lot No:*

Type of work: Building work Plumbing work *(X all applicable)*

Description of work:

New class 10a building (non-habitable shed) with importance Ivl 2 of size 8.000m span x 7.000m long x 3.000m eaves height. The building consists of cold formed steel framing members and cladding along with reinforced concrete pavement slab on ground where shown.

(new building / alteration / addition / repair / removal / re-erection / water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input checked="" type="checkbox"/>		Performance Solution: <input type="checkbox"/> <i>(X the appropriate box)</i>

Other details:

The design complies with the following deemed-to-satisfy parts of 2022 NCC-BCA Vol. 2 & Housing Provisions:

- Part H1D4(1)(a)(ii) for resistance of concrete (AS3600)
- Housing provision 2.2.4 for resistance of fastenings in concrete (AS5216)
- Part H1D6(3)(c) for resistance of cold-formed steel members (AS/NZS4600)
- Housing provision 2.2.3(a), (b) & (c) for the following actions to AS/NZS1170 parts 1 to 4:
 - o Imposed: 2.5 kPa to slab (light vehicles) where slab is shown
 - o Wind: Importance level 2, Region A4, Terrain Cat. 2.68, Topographic (Mt) 1.00, Shielding (Ms) 0.91 and Site wind speed (V_{sit,β}) 35.00 m/s
 - o Snow: 0.00 kpa
 - o Earthquake: Design category I

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
LINV1017281604 sheets 1 to 8 revision A	Venn Engineering Pty Ltd	08/10/2025
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:


2022 National Construction Code – Building Code of Australia Volume 2 & Housing Provisions
 Australian Standard for Structural design Actions parts 0, 1, 2, 3 & 4 (AS/NZS 1170)
 Australian Standard for Cold-formed Steel Structures (AS/NZS 4600:2018)
 Australian Standard for Concrete Structures (AS 3600:2018)
 Australian Standard for Post-installed Fasteners in Concrete (AS 5216:2021)
 Australian Steel Institute Design Guide Portal Frame Steel Sheds and Garages 2nd edition June 2014

Any other relevant documentation:**Attribution as designer:**

I, Grant Wood, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Grant Wood		08/10/2025
Licence No:	690930425		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater’s sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater’s infrastructure
- The works will not damage or interfere with TasWater’s works
- The works will not adversely affect TasWater’s operations
- The work are not within 2m of TasWater’s infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater’s water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<input type="text"/>	<input type="text"/>	<input type="text"/>

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: *Owner name*
 Address
 Suburb/postcode

Designer details:

Name: *Category:*
 Business name: *Phone No:*
 Business address:
 Fax No:
 Licence No: *Email address:*

Details of the proposed work:

Owner/Applicant *Designer's project reference No.*
Address: *Lot No:*

Type of work: Building work Plumbing work *(X all applicable)*

Description of work:

New class 10a building (non-habitable shed) with Importance lvl 2 of size 8.000 mm span x 8.000 mm long x 3.000 mm eaves height. The building consists of cold formed steel framing members and cladding along with reinforced concrete pavement slab on ground where shown.

(new building / alteration / addition / repair / removal / re-erection / water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input checked="" type="checkbox"/>		Performance Solution: <input type="checkbox"/> <i>(X the appropriate box)</i>

Other details:

The design complies with the following deemed-to-satisfy parts of 2022 NCC-BCA Vol. 2 & Housing Provisions:

- Part H1D4(1)(a)(ii) for resistance of concrete (AS3600)
- Housing provision 2.2.4 for resistance of fastenings in concrete (AS5216)
- Part H1D6(3)(c) for resistance of cold-formed steel members (AS/NZS4600)
- Housing provision 2.2.3(a), (b) & (c) for the following actions to AS/NZS1170 parts 1 to 4:
 - Imposed: 2.5 kPa to slab (light vehicles) where slab is shown
 - Wind: Region A4, Terrain Cat. 2.67, Topographic (M_t) 1, Shielding (M_s) 0.91 and Site wind speed (V_{site,p}) 35.1 m/sm/s
 - Snow: 0 kPa
 - Earthquake: Design category I

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
LINV1018689918 revision A Sheets 1-7	Venn Engineering Pty Ltd	21-10-2025
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

2022 National Construction Code – Building Code of Australia Volume 2 & Housing Provisions
 Australian Standard for Structural design Actions parts 0, 1, 2, 3 & 4 (AS/NZS 1170)
 Australian Standard for Cold-formed Steel Structures (AS/NZS 4600:2018)
 Australian Standard for Concrete Structures (AS 3600:2018)
 Australian Standard for Post-installed Fasteners in Concrete (AS 5216:2021)
 Australian Steel Institute Design Guide Portal Frame Steel Sheds and Garages 2nd edition June 2014

Any other relevant documentation:**Attribution as designer:**

I, Nick Franklin, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Nick Franklin		21-10-2025
Licence No:	178884896		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.
If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.
TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- The works will not damage or interfere with TasWater's works
- The works will not adversely affect TasWater's operations
- The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<input type="text"/>	<input type="text"/>	<input type="text"/>

STRUCTURAL GENERAL NOTES

1.0 General

- 1.1 These drawings are
 - a) Jointly owned by Steeline and Venn Engineering Pty Ltd
 - b) Provided for the sole purpose of obtaining building approval and guiding construction of a single building at the job address shown in the title block
 - c) Prohibited to be used for any other purpose without written authorisation from Steeline and Venn Engineering Pty Ltd.
 - d) Only valid if signed by the engineer and must not be altered in any way without signed approval from the engineer.
 - e) Produced to scale but dimensions shall not be obtained by measuring the drawings. All dimensions are in millimeters unless stated otherwise.
- 1.2 The engineer accepts no liability or responsibility for the contents of drawings that are invalid.
- 1.3 The word 'the engineer' used in these notes refers to an employee or nominated representative of Venn Engineering Pty Ltd.
- 1.4 The engineer is not the project manager or site supervisor for this project. It is the responsibility of the project manager or site supervisor in charge to ensure that the non-structural requirements of the Governing Building Code are considered and appropriately designed. This includes, but not limited to, fire & bushfire design, access requirements, future roof access requirements, lighting, glazing and electrical design, etc.

2.0 Structural Design

- 2.1 The structural framing components detailed in these drawings have been designed in accordance with the following documents for the design criteria detailed in these notes

Governing Building Code Loading Standards	2022 National Construction Code – Building Code of Australia Volume 2 and 2022 Housing Provisions Standard
	AS/NZS 1170.0:2002(+A5)
	AS/NZS 1170.1:2002(+A2)
	AS/NZS 1170.2:2021
Cold formed Steel member standard	AS/NZS 4600:2018
- 2.2 These drawings are also the limit of the Structural Design, any requirements for additional structural design of other items included in the project are specifically excluded if not shown on these drawings. This includes, but not limited to, requirements for additional loads that aren't specified including flood design loads, additional roof loads from solar panels, retaining walls required on site, driveway design etc.
- 2.3 These structural drawings and specifications represent the finished structure. The building is not considered complete until the installation of all components and details shown herein are installed according to the drawings.
- 2.4 No alterations are to be made to this structure without written approval of the engineer. This includes, but not limited to, modification to the plans and/or specifications, be the installation of additional openings, increased roof loads, skylight roof sheets or removal of cladding. If changes are made without written approval, such changes shall the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their full responsibility to replace or repair the condition of the building as directed by the engineer.

3.0 Design Criteria

Building class.....	10a
Building Importance level.....	2
Wind region.....	A4
Terrain category.....	2.67
Topographic multiplier.....	1
Shielding multiplier.....	0.91
Ultimate design wind speed.....	35.1 m/s
Snow load.....	0.00 kPa
Slab imposed load.....	2.5 kPa or 9kN applied over 0.3x0.3m area (light vehicles)
Allowable bearing capacity of foundation supporting footings.....	100 kPa
Allowable bearing capacity of foundation supporting slab.....	50 kPa
Allowable skin friction of foundation.....	25 kPa
Soil Type.....	Non-aggressive (not saline or acid sulfate)

4.0 Installation Building Contractor Responsibilities

- 4.1 The contractor shall verify and confirm all site conditions and dimensions. Any discrepancies between drawings and site conditions shall be referred to the engineer for decision before proceeding with the work.
- 4.2 All workmanship and materials are to be in accordance with the Governing Building Code including all relevant Australian Standards and local statutory authorities except where varied by the contract documents.
- 4.3 The contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part is overstressed under construction activities. They shall provide all temporary bracing, shoring or other means to avoid excessive stresses and to hold structural elements in place during erection. These temporary provisions shall remain in place until sufficient permanent members are erected to ensure the safety of partially erected structures. The contractor is responsible for meeting all laws regulating the erection of steel buildings including, but not limited to, Safe Work Australia guidelines.
- 4.4 The contractor shall be responsible for the location of all services in the vicinity of the works. Any services shown are provided for information only. The contractor shall confirm the location of all services prior to commencing and shall be responsible for the repair of any damage caused to services, as well as any loss incurred because of the damage to any service.

5.0 Foundation

- 5.1 The bearing capacity of the foundation supporting the footings and slab shall be confirmed before any concrete is placed.
- 5.2 No earth or debris is to fall into the footings or piers before and during placing of concrete.
- 5.3 All footings shall be located centrally under walls and columns unless noted otherwise.
- 5.4 Concrete embedment depths do not apply to locations where any uncompacted fill or disturbed ground exists or where walls of the excavation will not stand without support. Request further advice from the engineer in these circumstances.
- 5.5 Fill used for the support of a slab on ground shall be controlled fill or rolled fill as in accordance with clause 6.4.2 of AS 2870-2011.
- 5.6 Slabs less than 100sq.m in plan area are suitable for AS 2870-2011 site classes A, S & M. For larger slabs or for site classes M-D, H1, H1-D, H2, H2-D, E & E-D, the slab may experience cracking more than is considered normally acceptable. The cracking is considered of aesthetic concern only and should not effect the structural performance of the slab or shed. If this is not desired, contact the engineer for further advice.

6.0 Concrete

- 6.1 Concrete placement and workmanship shall be in accordance with AS 3600-2018 & AS 2870-2011.
- 6.2 Concrete shall be
 - a) N25 with slump of 100 mm in accordance with AS 1379-2007, with 20 mm maximum nominal aggregate size and no admixtures.
 - b) consolidated by mechanical vibration.
 - c) Cured for a minimum of 7 days using continuous ponding with potable water.
- 6.3 No holes, chases or embedment of pipes other than those shown on the drawings shall be made in concrete members without prior approval of the engineer.

7.0 Reinforcement

- 7.1 Reinforcement shall comply with AS/NZ 4671-2019.
- 7.2 Reinforcement is represented diagrammatically and not necessarily shown in true projection.
- 7.3 Welding of reinforcement shall not be permitted without the approval of the engineer.
- 7.4 All reinforcement shall be securely supported in its correct position ensuring the correct cover during placing of concrete by approved bar chairs, spacers or support bars. Approved chairs include stainless steel or plastic bar chairs for bottom reinforcement and plastic tipped wire bar chairs for top reinforcement. All chairs to be spaced at maximum of 750mm centres.
- 7.5 Cover to reinforcement shall be:
 - a) 50mm for surfaces of concrete in contact with the ground;
 - b) 30mm for top surfaces of slabs fully enclosed by the building without open bays or
 - c) 60mm for top surfaces of slabs more than 1 km from the coastline with open bays.
 - d) For buildings with open bays within 1km of the coast, contact the engineer for cover and concrete grade requirements.
- 7.6 Reinforcement shall be lapped 500mm for 12mmØ bars and 800mm for 16mmØ bars.
- 7.7 Mesh reinforcement shall be lapped such that the two outermost wires of one sheet overlap the two outermost wires of the other sheet by 25 mm.
- 7.8 Hooks, bends and cogs to be in accordance with AS 3600-2018 unless noted otherwise on drawings.

8.0 Anchor Bolts

- 8.1 All anchors bolts shall be installed in accordance with the manufacturer's installation instructions.
- 8.2 Drill holes using a percussion drill (coring not permitted) to the correct hole diameter and depth as specified in the drawings.
- 8.3 Thoroughly clean and blow the dust out of the holes using the cleaning accessories prescribed by the manufacturer's instructions.
- 8.4 Substitution of anchors bolts and chemical epoxy adhesive is not permitted unless written confirmation from the engineer is provided.
- 8.5 For chemical anchors, ensure load is not applied to the anchors whilst epoxy adhesive is curing.

9.0 Light Gauge Cold-formed Steel

- 9.1 All light gauge cold-formed steel shall comply with AS 1397-2021 and be the following grades

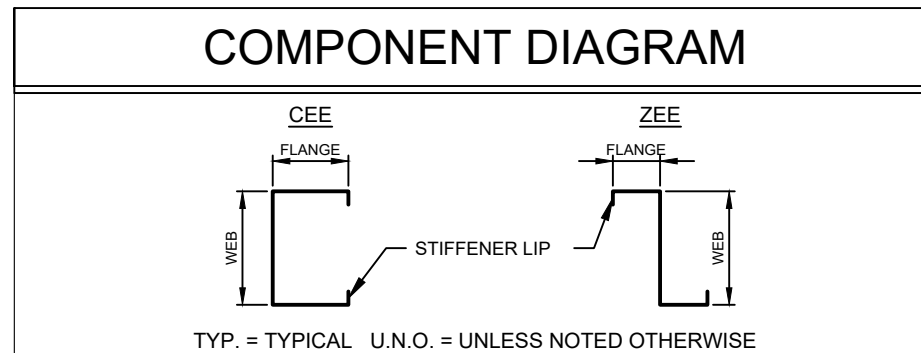
Thickness(mm)	Steel grade (yield stress, MPa)	Protective coating (g/m ²)
BMT ≤ 1.0mm	G550	Z350
1.0mm < BMT < 1.5mm	G500	Z350
1.5mm ≤ BMT ≤ 3.0mm	G450	Z350
- 9.2 Welding of light gauge cold-formed steel shall not be permitted.
- 9.3 Column and rafter members shall not be drilled or notched without prior approval of the engineer.
- 9.4 Round holes may be drilled through any girt or purlin member within the middle third of the depth of that member and not within 600mm of member end unless noted otherwise.
- 9.5 All bolts used to connect light gauge cold-formed steel members shall be
 - a) Zinc coated M12 (min.) grade 4.6 snug tightened complying to AS 1111.1-2015 & AS 1112.3-2015 unless noted otherwise.
 - b) Spaced no less than 3 bolt diameters between centres.
 - c) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
- 9.6 All screws used to connect light gauge cold formed steel members (excluding sheeting) shall be
 - a) 10g (min.) self-drilling screws complying with AS 3566.1-2002.
 - b) Corrosion resistance class 4 in accordance with AS 3566.2-2002 for buildings within 1 km from the coastline with open bays or class 3 otherwise.
 - c) Spaced no less than 3 bolt diameters between centres.
 - d) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.

10.0 Roof & Wall Sheeting

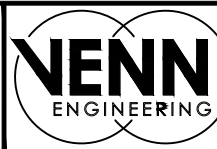
- 10.1 Roof & wall sheeting shall comply with AS 1397-2018 and have suitable corrosion protection complying with Table 7.2.2a of the 2022 Housing Provisions Standard.
- 10.2 During construction and maintenance, no foot traffic shall occur within end spans of sheeting, foot traffic shall occur
 - a) Evenly across at least two ribs for corrugated profiled sheeting or
 - b) In the pans for pan-type profiled sheeting.
- 10.3 Any roof skylights shall be approved by the engineer
- 10.4 Safety mesh shall be installed in accordance with the building code

11.0 Door & Window Components

- 11.1 Wind-locked roller doors are assumed to remain in-place and resist the ultimate limit state wind loading except for in cyclonic regions
- 11.2 Non-wind-locked roller doors are assumed to have failed at the ultimate limit state wind loading
- 11.3 Personal access doors shall be rated for the wind loading parameters stated in the design criteria (see section 3.0)
- 11.4 All windows shall be in accordance with AS 1288-2021 & AS 2047-2014(+A2) as appropriate for the wind loading parameters stated in the design criteria (see section 3.0)



REV	DATE	DESCRIPTION
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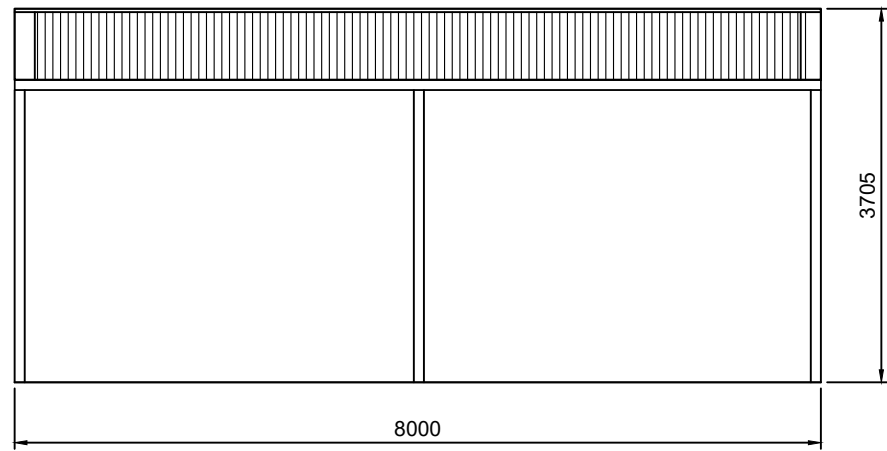


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ABN 39 626 802 257

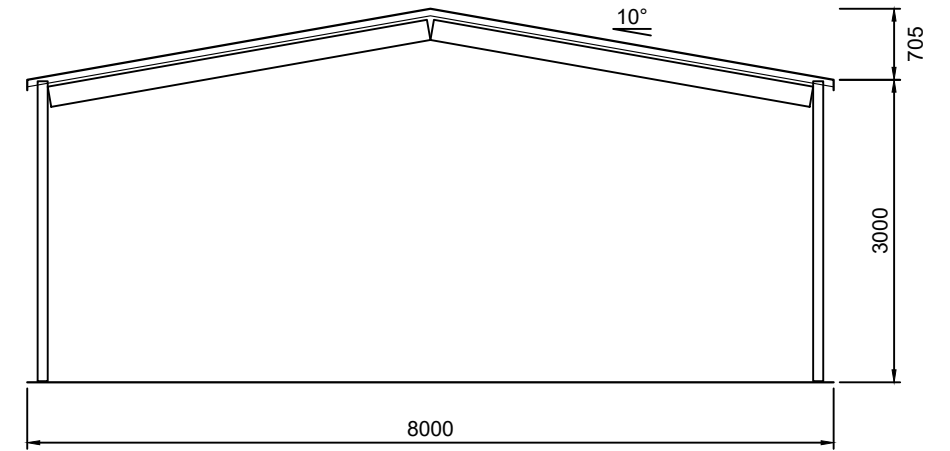
Signed *Nick Franklin* Date 21-10-2025
Nick Franklin MIEAust CPEng NER
Registered EA Chartered Professional Engineer (No. 4607651)
Registered Professional Engineer QLD (No. 32480)
Registered Civil Engineer Building Practitioner VIC (No. PE0015843)
Building Services Provider (Engineer Civil) TAS (No. 178894898)

Customer Name: Travis Gray
Site Address: 87 King St
Westbury,
TAS, 7303

DATE 21-10-2025
JOB NO. LINV1018689918
SHEET 1 of 7

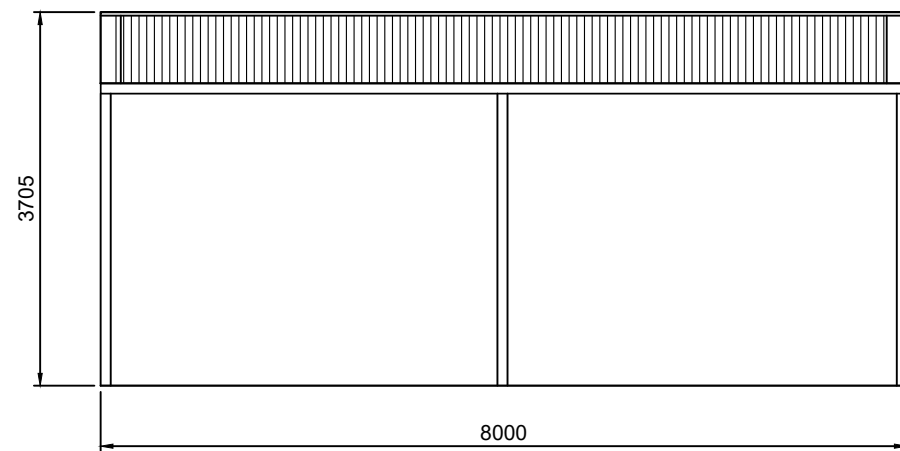


2 SIDEWALL B BUILDING ELEVATION
2 SCALE: 1:75

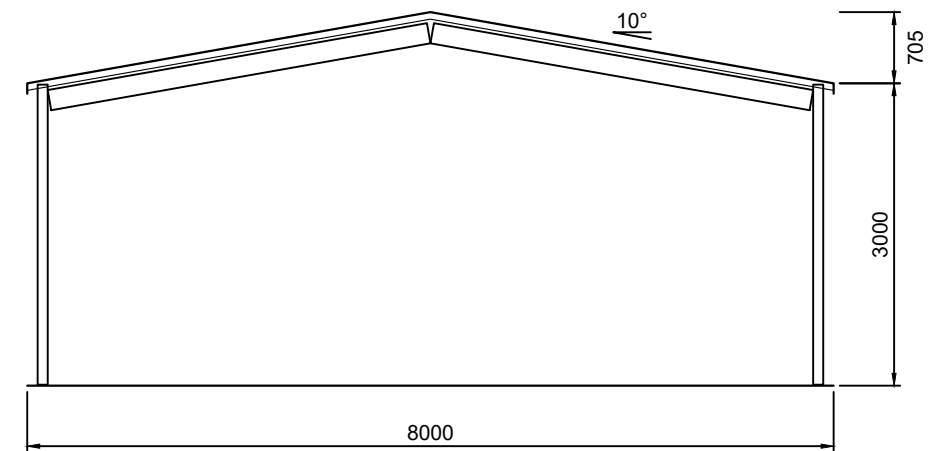


3 REAR BUILDING ELEVATION
2 SCALE: 1:75

MEMBER SCHEDULE			
COMPONENT		TYPE	
PORTAL (FRAMES 1-3)	MEMBER	RAFTER	Single C20024
		COLUMN	SHS 100x100x3.0
		APEX BRACE	-
		KNEE BRACE	-
	BASE CONNECTION	BRACKET TYPE	SHS2-100
ANCHOR BOLTS		(2) ICCONS TSM 14 x 105mm Embedded 100mm	
ROOF PURLINS	MEMBER	Single Z10010 @ 792mm centres	
EAVE PURLIN	MEMBER	Single C30024	
SIDEWALL GIRTS	MEMBER	-	
ENDWALL GIRTS	MEMBER	-	



1 SIDEWALL A BUILDING ELEVATION
2 SCALE: 1:75

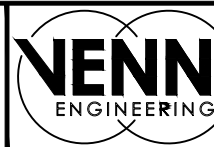


4 FRONT BUILDING ELEVATION
2 SCALE: 1:75

REV	DATE	DESCRIPTION
A	21-10-2025	-



ANOTHER
COLD FORMED BUILDING
DESIGNED BY
ACT BUILDING SYSTEMS

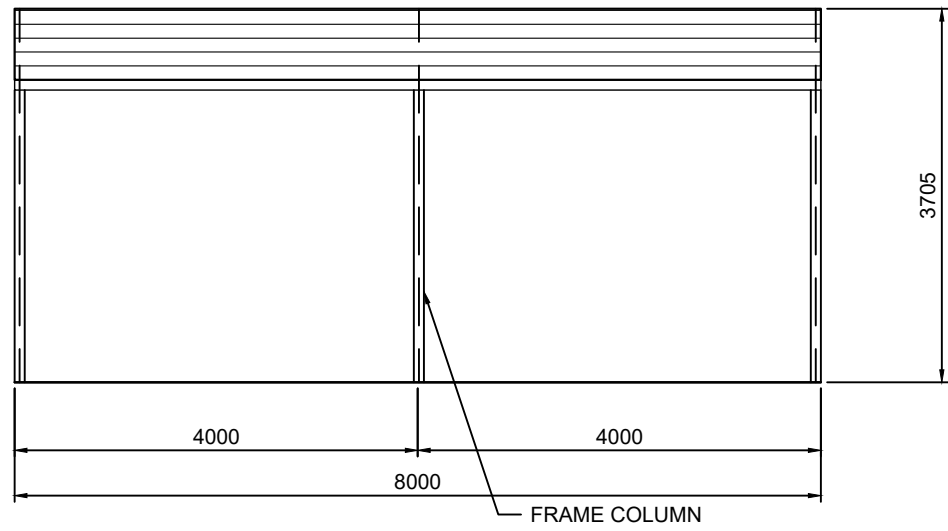


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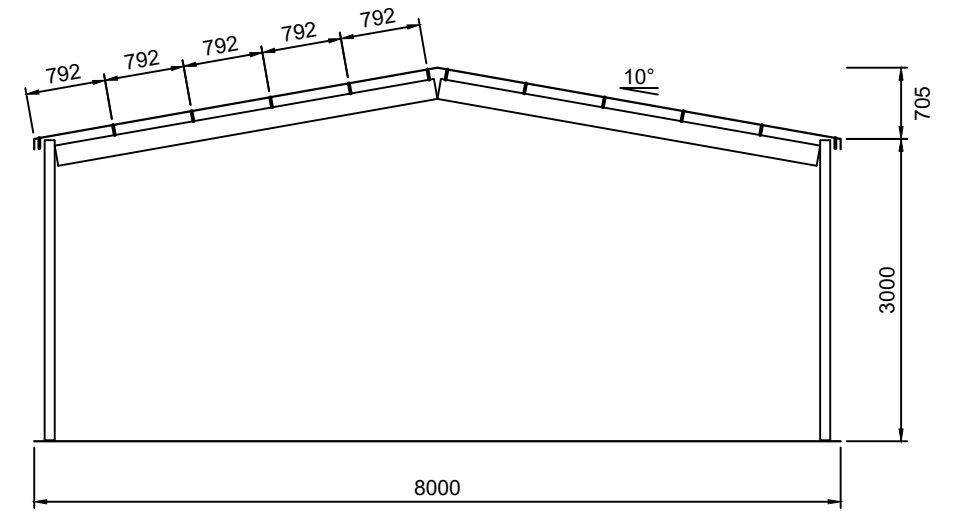
Signed *Nick Franklin* Date 21-10-2025
Nick Franklin MIEAust CPEng NER
 Registered EA Chartered Professional Engineer (No. 4607651)
 Registered Professional Engineer QLD (No. 32480)
 Registered Civil Engineer Building Practitioner VIC (No. PE0015843)
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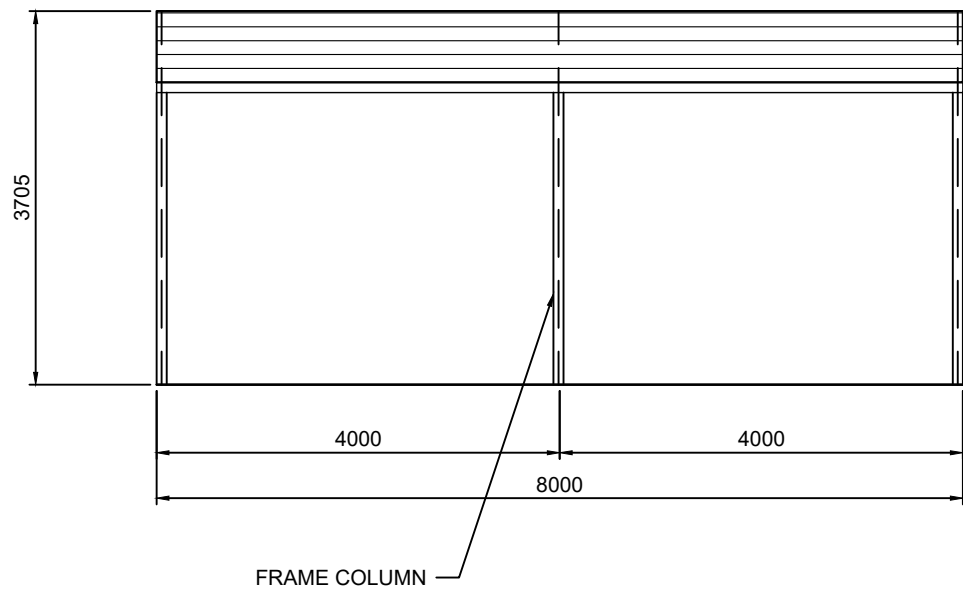
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 SHEET 2 of 7



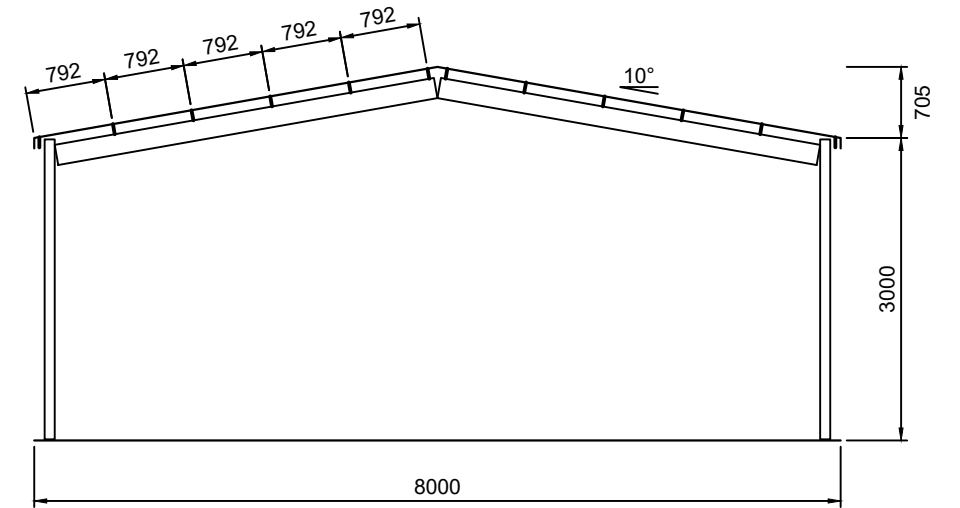
2 SIDEWALL B FRAMING ELEVATION
3 SCALE: 1:75



3 REAR FRAMING ELEVATION
3 SCALE: 1:75 FRAME #3

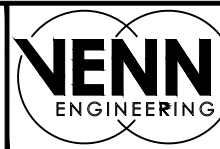


1 SIDEWALL A FRAMING ELEVATION
3 SCALE: 1:75



4 FRONT FRAMING ELEVATION
3 SCALE: 1:75 FRAME #1

REV	DATE	DESCRIPTION
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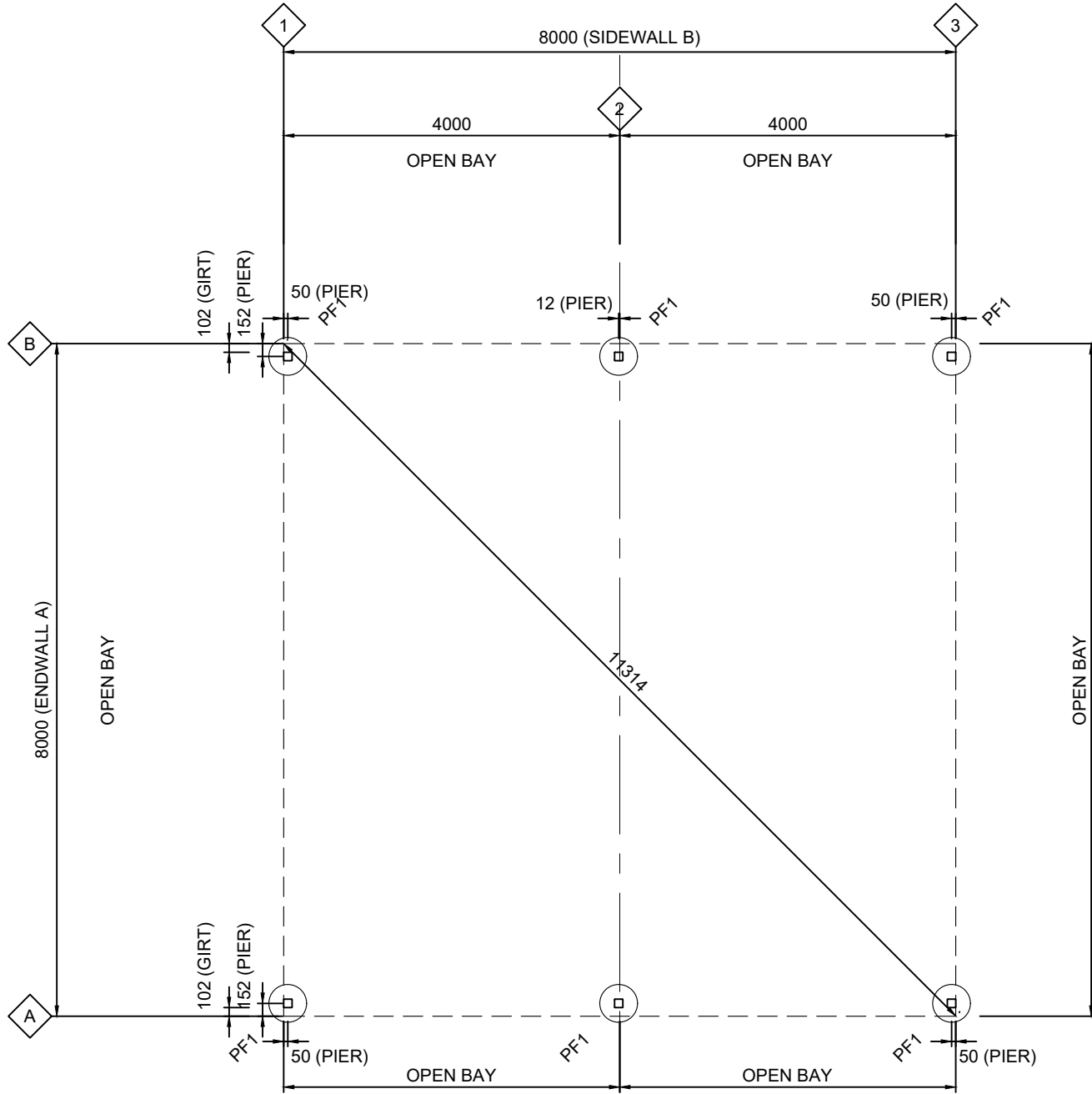


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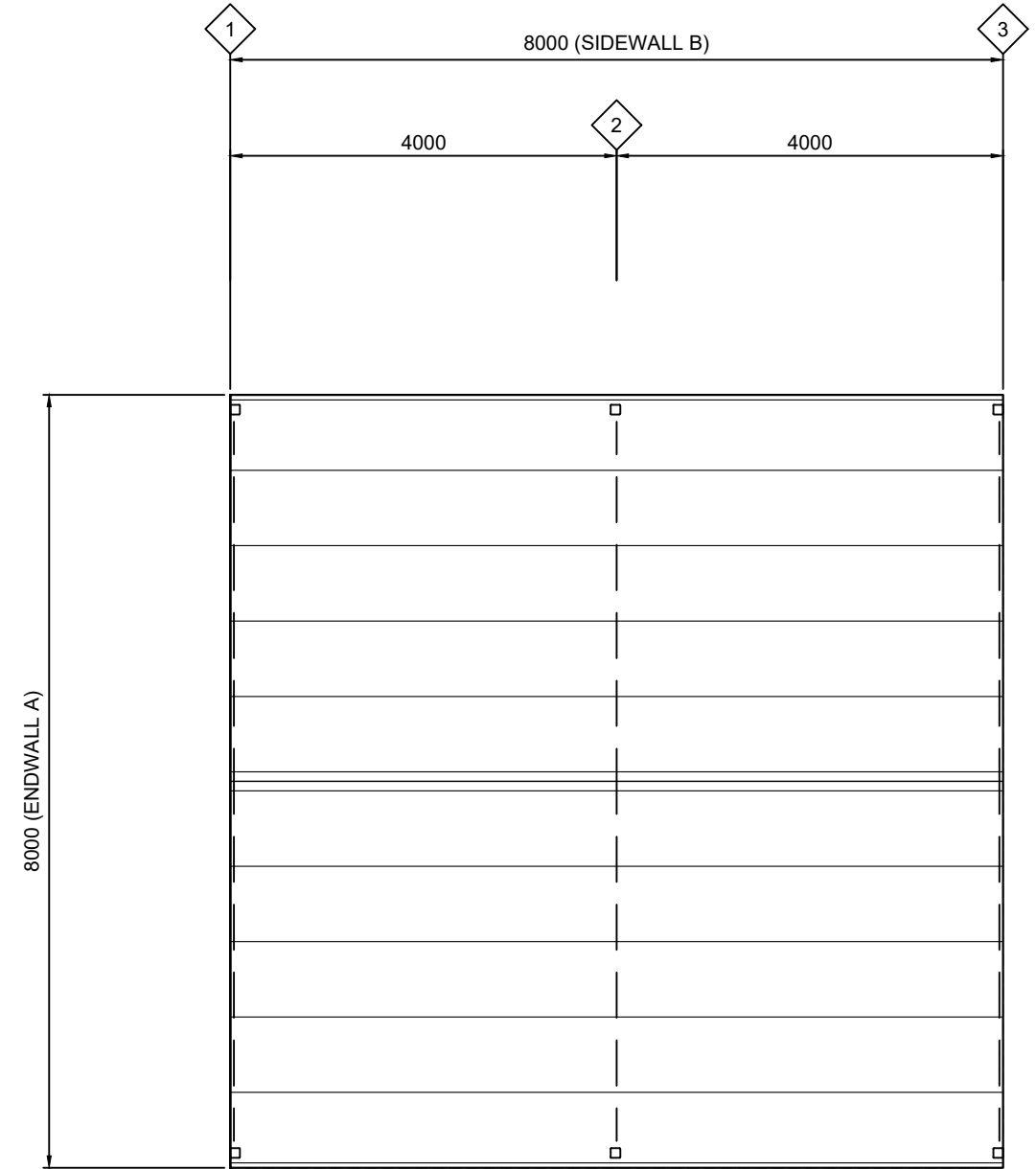
Signed *N. Franklin* Date 21-10-2025
Nick Franklin MIEAust CPEng NER
Registered EA Chartered Professional Engineer (No. 4607651)
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 SHEET 3 of 7



1 FOOTING/SLAB FLOOR PLAN
4 SCALE: 1:75 PF1 - 450Ø REINFORCED CONCRETE PIERS TO DETAIL

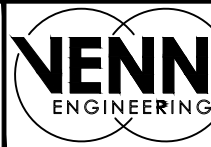


2 ROOF FRAMING PLAN
4 SCALE: 1:75

REV	DATE	DESCRIPTION
A	21-10-2025	-



ANOTHER
COLD FORMED BUILDING
DESIGNED BY
ACT BUILDING SYSTEMS

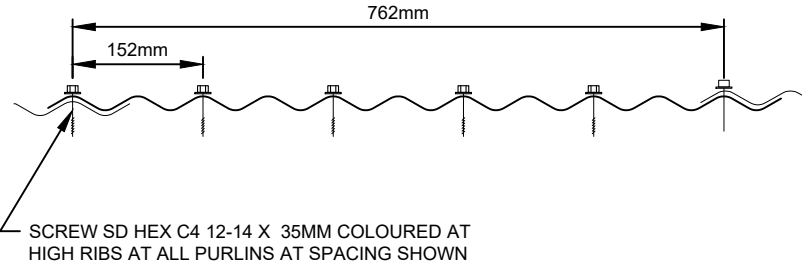
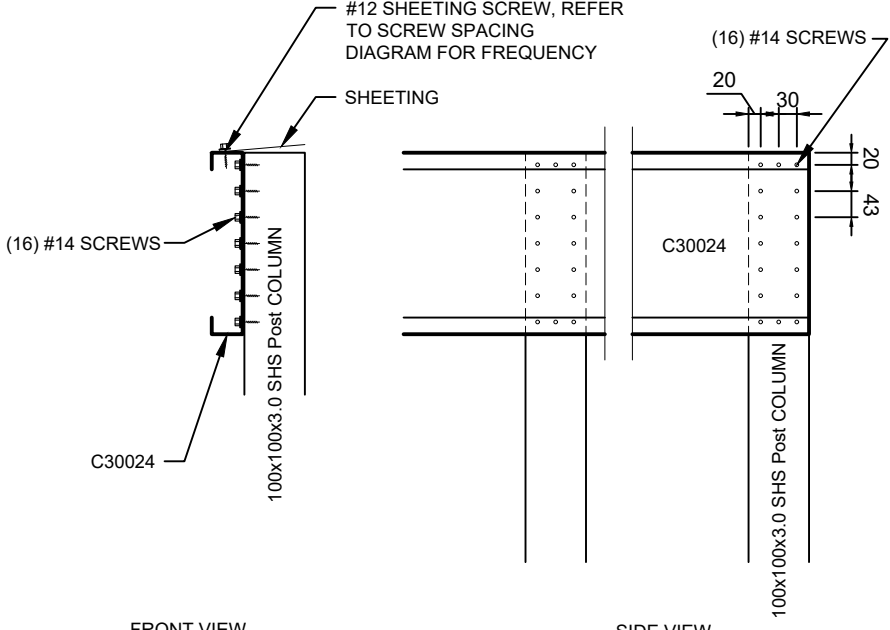
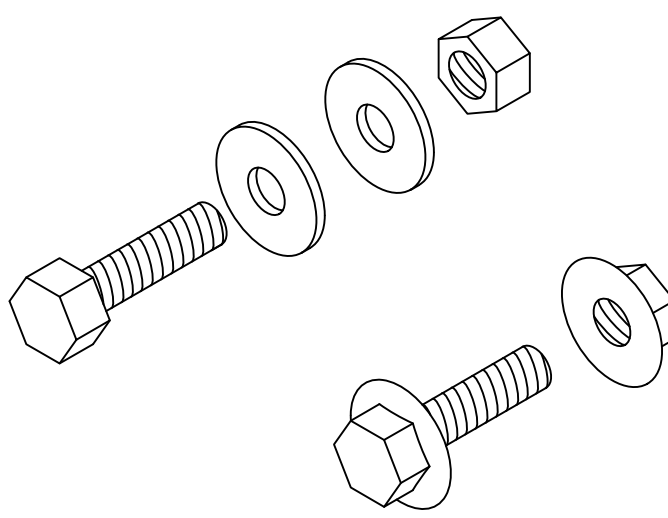
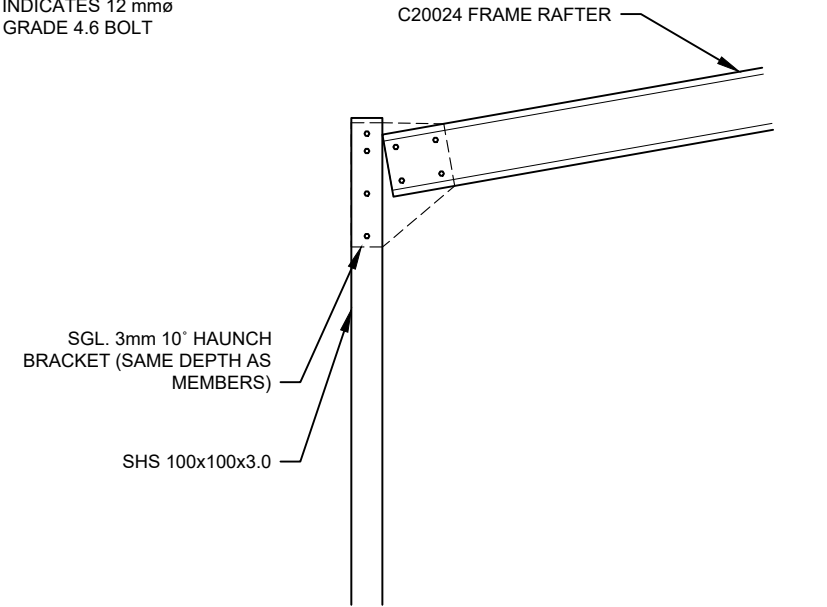
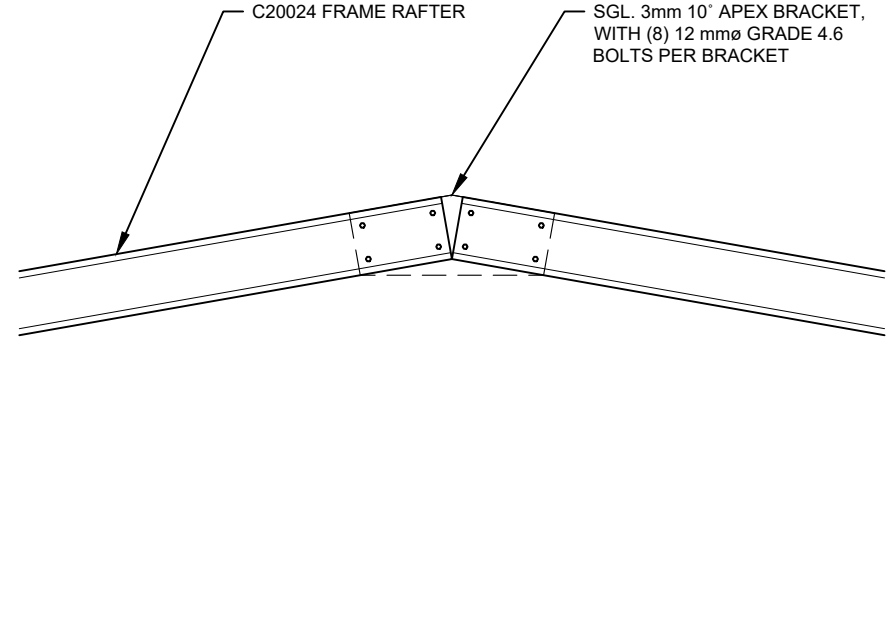
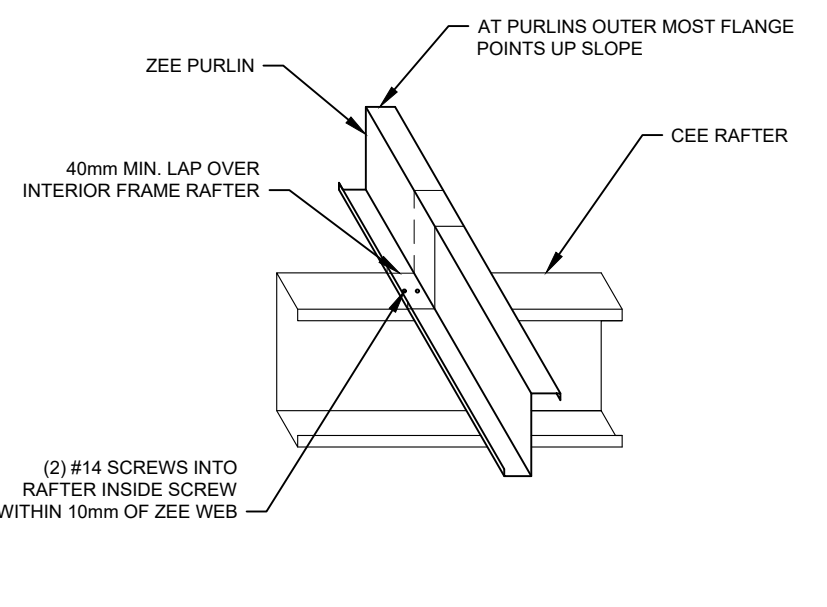


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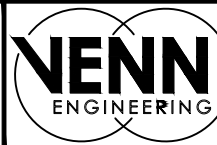
Customer Name: Travis Gray
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 JOB NO. LINV1018689918
 SHEET 4 of 7

<p>NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADDT'L WEATHERTIGHTNESS RECOMMENDATIONS.</p>  <p>762mm 152mm</p> <p>SCREW SD HEX C4 12-14 X 35MM COLOURED AT HIGH RIBS AT ALL PURLINS AT SPACING SHOWN</p> <p>Steeline Corrugated 0.42</p>	 <p>#12 SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY</p> <p>SHEETING</p> <p>(16) #14 SCREWS</p> <p>20 30</p> <p>20 43</p> <p>C30024</p> <p>100x100x3.0 SHS Post COLUMN</p> <p>100x100x3.0 SHS Post COLUMN</p> <p>FRONT VIEW</p> <p>SIDE VIEW</p>	<p>ALL NUTS AND BOLTS TO HAVE WASHER OR FLANGED HEADS</p> 
<p>H</p> <p>ROOF SHEETING</p>	<p>O</p> <p>EAVE CONNECTION</p>	<p>P</p> <p>BOLT OPTIONS</p>
<p>INDICATES 12 mmØ GRADE 4.6 BOLT</p>  <p>C20024 FRAME RAFTER</p> <p>SGL 3mm 10' HAUNCH BRACKET (SAME DEPTH AS MEMBERS)</p> <p>SHS 100x100x3.0</p>	 <p>C20024 FRAME RAFTER</p> <p>SGL 3mm 10' APEX BRACKET, WITH (8) 12 mmØ GRADE 4.6 BOLTS PER BRACKET</p>	 <p>ZEE PURLIN</p> <p>40mm MIN. LAP OVER INTERIOR FRAME RAFTER</p> <p>AT PURLINS OUTER MOST FLANGE POINTS UP SLOPE</p> <p>CEE RAFTER</p> <p>(2) #14 SCREWS INTO RAFTER INSIDE SCREW WITHIN 10mm OF ZEE WEB</p>
<p>A</p> <p>HAUNCH CONNECTION</p>	<p>B</p> <p>APEX CONNECTION</p>	<p>D</p> <p>ZEE PURLIN CONNECTION</p>

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

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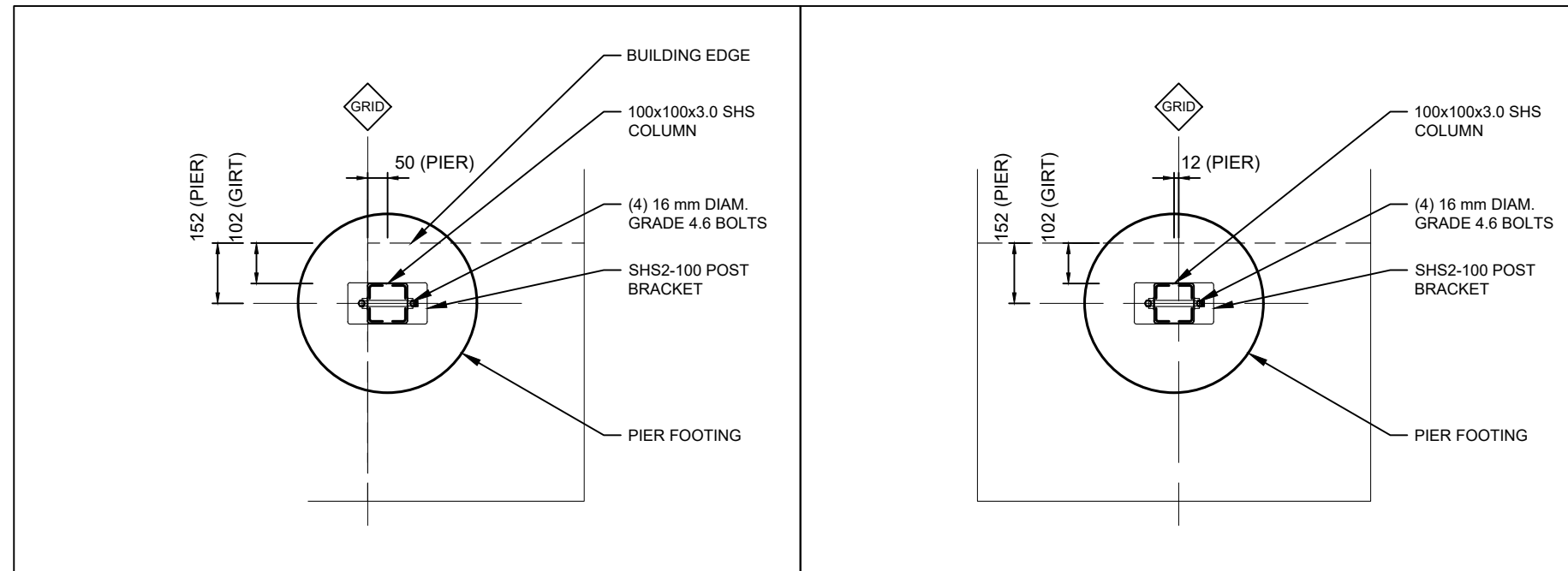


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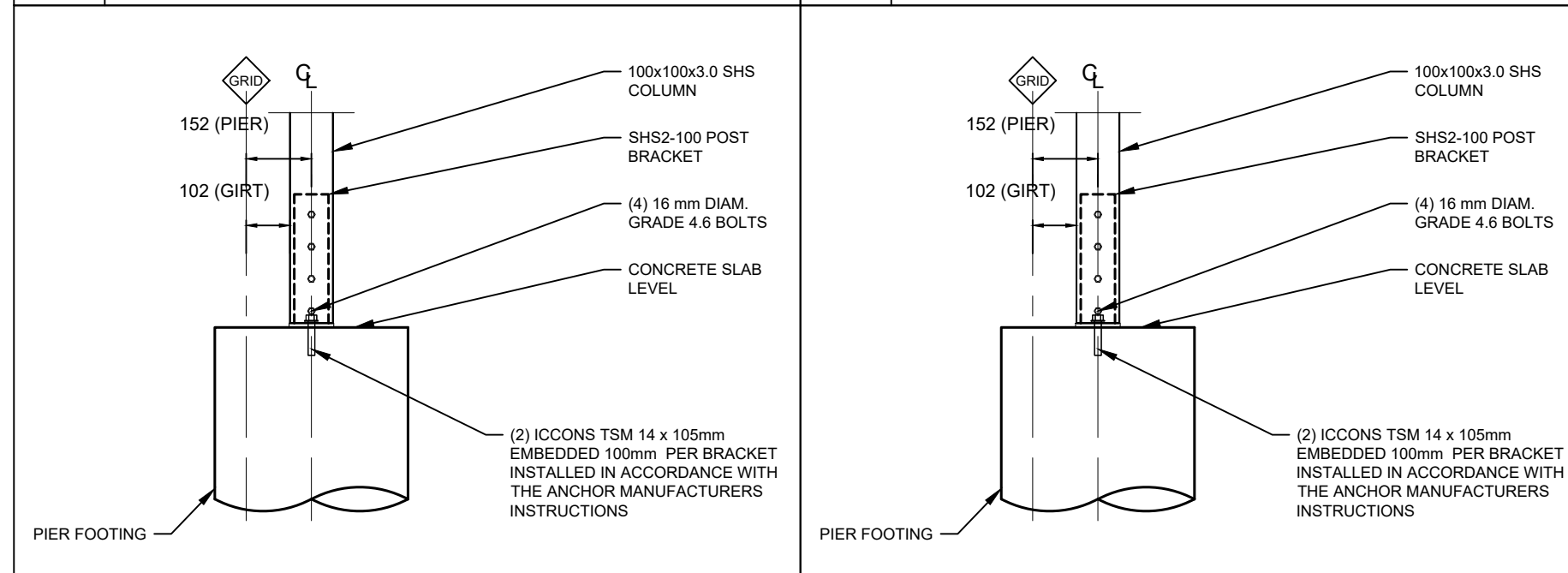
Signed *N. Franklin* Date 21-10-2025
Nick Franklin MIEAust CPEng NER
Registered EA Chartered Professional Engineer (No. 4607651)
Registered Professional Engineer QLD (No. 32480)
Registered Civil Engineer Building Practitioner VIC (No. PE0015843)
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Customer Name: Travis Gray
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DATE 21-10-2025
JOB NO. LINV1018689918
SHEET 5 of 7

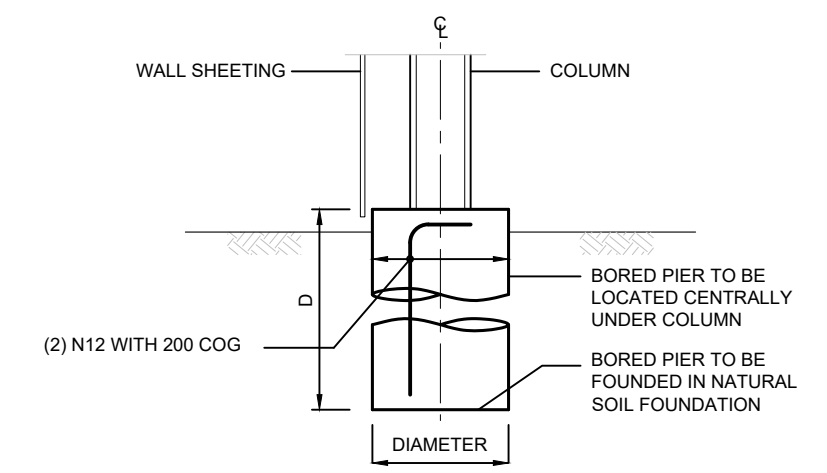


S1 CORNER COLUMN BASE DETAIL **S3 FRAME COLUMN BASE DETAIL**



S2 CORNER COLUMN BASE DETAIL 2 **S4 FRAME COLUMN BASE DETAIL 2**

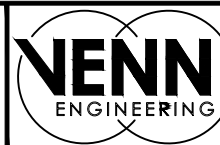
	PF1
D	700mm
Diameter	450mm



Y PIER DETAIL

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
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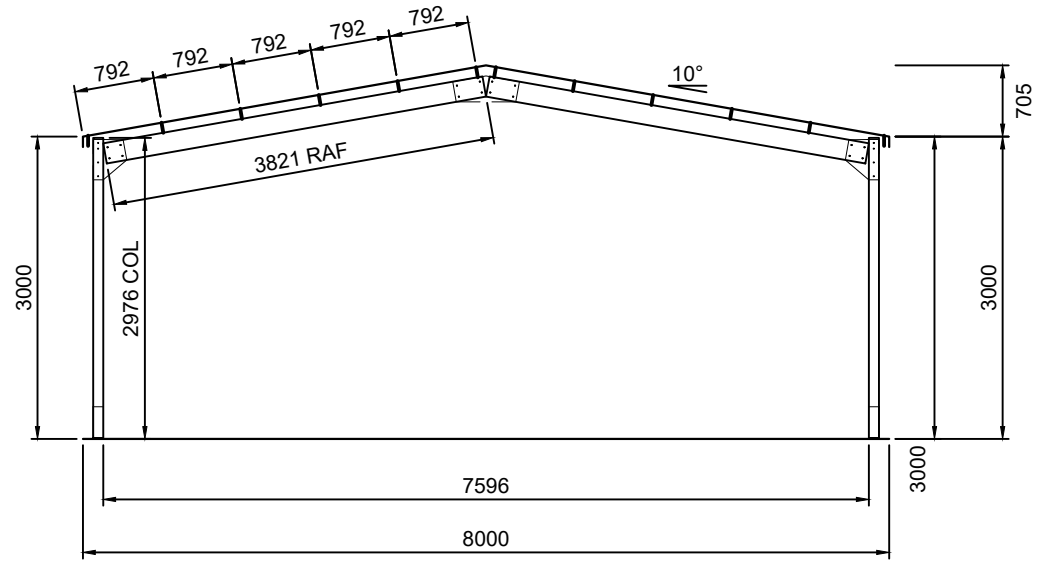


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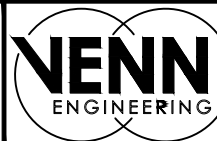
Customer Name: Travis Gray
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DATE 21-10-2025
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SHEET 6 of 7



1 INTERNAL FRAMING ELEVATION
7 SCALE: 1:75 FRAME #2

REV	DATE	DESCRIPTION
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 SHEET 7 of 7

Generic Temporary Bracing Information

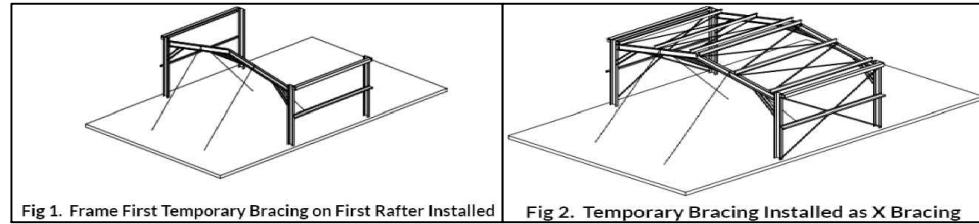
The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials

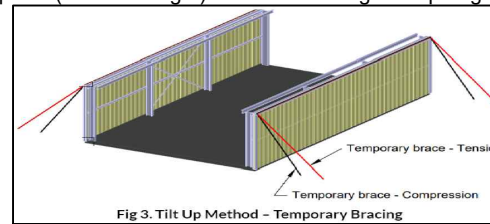
The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.



If the Tilt Up Method is used (where walls are constructed on the ground and then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.



Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

Bracing Removal

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/> 'Construction work – steel erection. Information sheet', 2016.

<https://www.steel.org.au/> 'Structural steelwork fabrication and erection code of practice', 2014.

<https://www.standards.org.au/> AS/NZS 5131:2016 'Structural steelwork – Fabrication and erection.

Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

STRUCTURAL GENERAL NOTES

1.0 General

- 1.1 These drawings are
 - a) Jointly owned by Steeline and Venn Engineering Pty Ltd
 - b) Provided for the sole purpose of obtaining building approval and guiding construction of a single building at the job address shown in the title block
 - c) Prohibited to be used for any other purpose without written authorisation from Steeline and Venn Engineering Pty Ltd.
 - d) Only valid if signed by the engineer and must not be altered in any way without signed approval from the engineer.
 - e) Produced to scale but dimensions shall not be obtained by measuring the drawings. All dimensions are in millimeters unless stated otherwise.
- 1.2 The engineer accepts no liability or responsibility for the contents of drawings that are invalid.
- 1.3 The word 'the engineer' used in these notes refers to an employee or nominated representative of Venn Engineering Pty Ltd.
- 1.4 The engineer is not the project manager or site supervisor for this project. It is the responsibility of the project manager or site supervisor in charge to ensure that the non-structural requirements of the Governing Building Code are considered and appropriately designed. This includes, but not limited to, fire & bushfire design, access requirements, future roof access requirements, lighting, glazing and electrical design, etc.

2.0 Structural Design

- 2.1 The structural framing components detailed in these drawings have been designed in accordance with the following documents for the design criteria detailed in these notes

Governing Building Code Loading Standards	2022 National Construction Code – Building Code of Australia Volume 2 and 2022 Housing Provisions Standard AS/NZS 1170.0:2002(+A5) AS/NZS 1170.1:2002(+A2) AS/NZS 1170.2:2021
Cold formed Steel member standard	AS/NZS 4600:2018
- 2.2 These drawings are also the limit of the Structural Design, any requirements for additional structural design of other items included in the project are specifically excluded if not shown on these drawings. This includes, but not limited to, requirements for additional loads that aren't specified including flood design loads, additional roof loads from solar panels, retaining walls required on site, driveway design etc.
- 2.3 These structural drawings and specifications represent the finished structure. The building is not considered complete until the installation of all components and details shown herein are installed according to the drawings.
- 2.4 No alterations are to be made to this structure without written approval of the engineer. This includes, but not limited to, modification to the plans and/or specifications, be the installation of additional openings, increased roof loads, skylight roof sheets or removal of cladding. If changes are made without written approval, such changes shall the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their full responsibility to replace or repair the condition of the building as directed by the engineer.

3.0 Design Criteria

Building class.....	10a
Building Importance level.....	2
Wind region.....	A4
Terrain category.....	2.39
Topographic multiplier.....	1
Shielding multiplier.....	0.9
Ultimate design wind speed.....	35.6 m/s
Snow load.....	0.00 kPa
Slab imposed load.....	2.5 kPa or 9kN applied over 0.3x0.3m area (light vehicles)
Allowable bearing capacity of foundation supporting footings.....	100 kPa
Allowable bearing capacity of foundation supporting slab.....	50 kPa
Allowable skin friction of foundation.....	25 kPa
Soil Type.....	Non-aggressive (not saline or acid sulfate)

4.0 Installation Building Contractor Responsibilities

- 4.1 The contractor shall verify and confirm all site conditions and dimensions. Any discrepancies between drawings and site conditions shall be referred to the engineer for decision before proceeding with the work.
- 4.2 All workmanship and materials are to be in accordance with the Governing Building Code including all relevant Australian Standards and local statutory authorities except where varied by the contract documents.
- 4.3 The contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part is overstressed under construction activities. They shall provide all temporary bracing, shoring or other means to avoid excessive stresses and to hold structural elements in place during erection. These temporary provisions shall remain in place until sufficient permanent members are erected to ensure the safety of partially erected structures. The contractor is responsible for meeting all laws regulating the erection of steel buildings including, but not limited to, Safe Work Australia guidelines.
- 4.4 The contractor shall be responsible for the location of all services in the vicinity of the works. Any services shown are provided for information only. The contractor shall confirm the location of all services prior to commencing and shall be responsible for the repair of any damage caused to services, as well as any loss incurred because of the damage to any service.

5.0 Foundation

- 5.1 The bearing capacity of the foundation supporting the footings and slab shall be confirmed before any concrete is placed.
- 5.2 No earth or debris is to fall into the footings or piers before and during placing of concrete.
- 5.3 All footings shall be located centrally under walls and columns unless noted otherwise.
- 5.4 Concrete embedment depths do not apply to locations where any uncompacted fill or disturbed ground exists or where walls of the excavation will not stand without support. Request further advice from the engineer in these circumstances.
- 5.5 Fill used for the support of a slab on ground shall be controlled fill or rolled fill as in accordance with clause 6.4.2 of AS 2870-2011.
- 5.6 Slabs less than 100sq.m in plan area are suitable for AS 2870-2011 site classes A, S & M. For larger slabs or for site classes M-D, H1, H1-D, H2, H2-D, E & E-D, the slab may experience cracking more than is considered normally acceptable. The cracking is considered of aesthetic concern only and should not effect the structural performance of the slab or shed. If this is not desired, contact the engineer for further advice.

6.0 Concrete

- 6.1 Concrete placement and workmanship shall be in accordance with AS 3600-2018 & AS 2870-2011.
- 6.2 Concrete shall be
 - a) N25 with slump of 100 mm in accordance with AS 1379-2007, with 20 mm maximum nominal aggregate size and no admixtures.
 - b) consolidated by mechanical vibration.
 - c) Cured for a minimum of 7 days using continuous ponding with potable water.
- 6.3 No holes, chases or embedment of pipes other than those shown on the drawings shall be made in concrete members without prior approval of the engineer.

7.0 Reinforcement

- 7.1 Reinforcement shall comply with AS/NZ 4671-2019.
- 7.2 Reinforcement is represented diagrammatically and not necessarily shown in true projection.
- 7.3 Welding of reinforcement shall not be permitted without the approval of the engineer.
- 7.4 All reinforcement shall be securely supported in its correct position ensuring the correct cover during placing of concrete by approved bar chairs, spacers or support bars. Approved chairs include stainless steel or plastic bar chairs for bottom reinforcement and plastic tipped wire bar chairs for top reinforcement. All chairs to be spaced at maximum of 750mm centres.
- 7.5 Cover to reinforcement shall be:
 - a) 50mm for surfaces of concrete in contact with the ground;
 - b) 30mm for top surfaces of slabs fully enclosed by the building without open bays or
 - c) 60mm for top surfaces of slabs more than 1 km from the coastline with open bays.
 - d) For buildings with open bays within 1km of the coast, contact the engineer for cover and concrete grade requirements.
- 7.6 Reinforcement shall be lapped 500mm for 12mmØ bars and 800mm for 16mmØ bars.
- 7.7 Mesh reinforcement shall be lapped such that the two outermost wires of one sheet overlap the two outermost wires of the other sheet by 25 mm.
- 7.8 Hooks, bends and cogs to be in accordance with AS 3600-2018 unless noted otherwise on drawings.

8.0 Anchor Bolts

- 8.1 All anchors bolts shall be installed in accordance with the manufacturer's installation instructions.
- 8.2 Drill holes using a percussion drill (coring not permitted) to the correct hole diameter and depth as specified in the drawings.
- 8.3 Thoroughly clean and blow the dust out of the holes using the cleaning accessories prescribed by the manufacturer's instructions.
- 8.4 Substitution of anchors bolts and chemical epoxy adhesive is not permitted unless written confirmation from the engineer is provided.
- 8.5 For chemical anchors, ensure load is not applied to the anchors whilst epoxy adhesive is curing.

9.0 Light Gauge Cold-formed Steel

- 9.1 All light gauge cold-formed steel shall comply with AS 1397-2021 and be the following grades

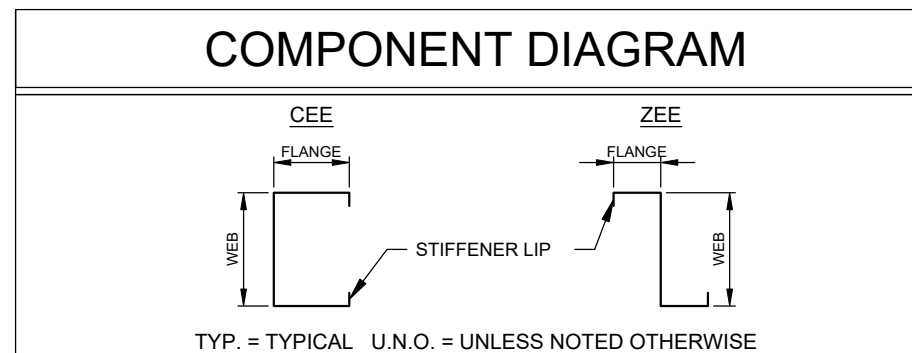
Thickness(mm)	Steel grade (yield stress, MPa)	Protective coating (g/m2)
BMT ≤ 1.0mm	G550	Z350
1.0mm < BMT < 1.5mm	G500	Z350
1.5mm ≤ BMT ≤ 3.0mm	G450	Z350
- 9.2 Welding of light gauge cold-formed steel shall not be permitted.
- 9.3 Column and rafter members shall not be drilled or notched without prior approval of the engineer.
- 9.4 Round holes may be drilled through any girt or purlin member within the middle third of the depth of that member and not within 600mm of member end unless noted otherwise.
- 9.5 All bolts used to connect light gauge cold-formed steel members shall be
 - a) Zinc coated M12 (min.) grade 4.6 snug tightened complying to AS 1111.1-2015 & AS 1112.3-2015 unless noted otherwise.
 - b) Spaced no less than 3 bolt diameters between centres.
 - c) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
- 9.6 All screws used to connect light gauge cold formed steel members (excluding sheeting) shall be
 - a) 10g (min.) self-drilling screws complying with AS 3566.1-2002.
 - b) Corrosion resistance class 4 in accordance with AS 3566.2-2002 for buildings within 1 km from the coastline with open bays or class 3 otherwise.
 - c) Spaced no less than 3 bolt diameters between centres.
 - d) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.

10.0 Roof & Wall Sheeting

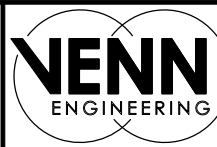
- 10.1 Roof & wall sheeting shall comply with AS 1397-2018 and have suitable corrosion protection complying with Table 7.2.2a of the 2022 Housing Provisions Standard.
- 10.2 During construction and maintenance, no foot traffic shall occur within end spans of sheeting, foot traffic shall occur
 - a) Evenly across at least two ribs for corrugated profiled sheeting or
 - b) In the pans for pan-type profiled sheeting.
- 10.3 Any roof skylights shall be approved by the engineer
- 10.4 Safety mesh shall be installed in accordance with the building code

11.0 Door & Window Components

- 11.1 Wind-locked roller doors are assumed to remain in-place and resist the ultimate limit state wind loading except for in cyclonic regions
- 11.2 Non-wind-locked roller doors are assumed to have failed at the ultimate limit state wind loading
- 11.3 Personal access doors shall be rated for the wind loading parameters stated in the design criteria (see section 3.0)
- 11.4 All windows shall be in accordance with AS 1288-2021 & AS 2047-2014(+A2) as appropriate for the wind loading parameters stated in the design criteria (see section 3.0)



REV	DATE	DESCRIPTION
A	08-10-2025	-



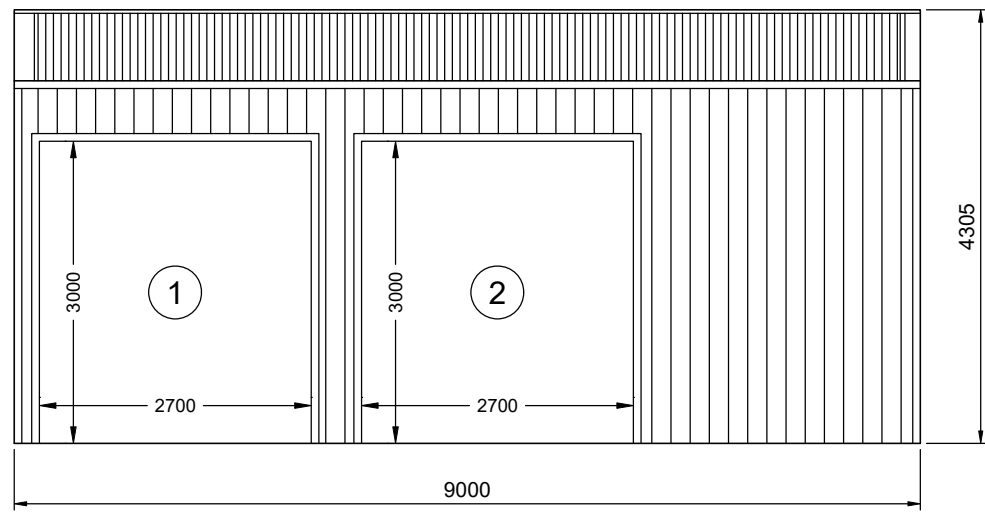
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Signed *[Signature]* Date 08-10-2025

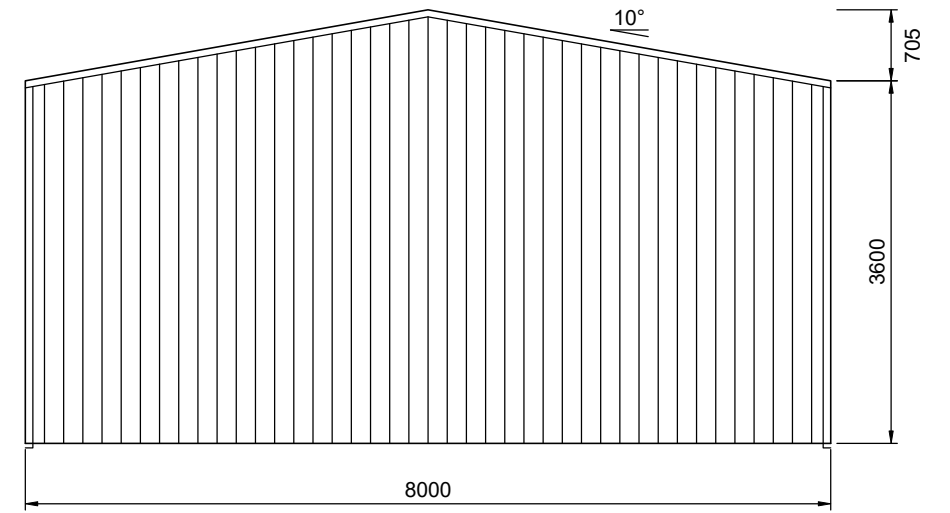
Grant J Wood MIEAust CPEng NER RPEQ
Registered EA Chartered Professional Engineer (No. 2383009)
Registered Professional Engineer QLD (No. 14384)
Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
Registered Certifying Engineer (structural) NT (No. 306371ES)
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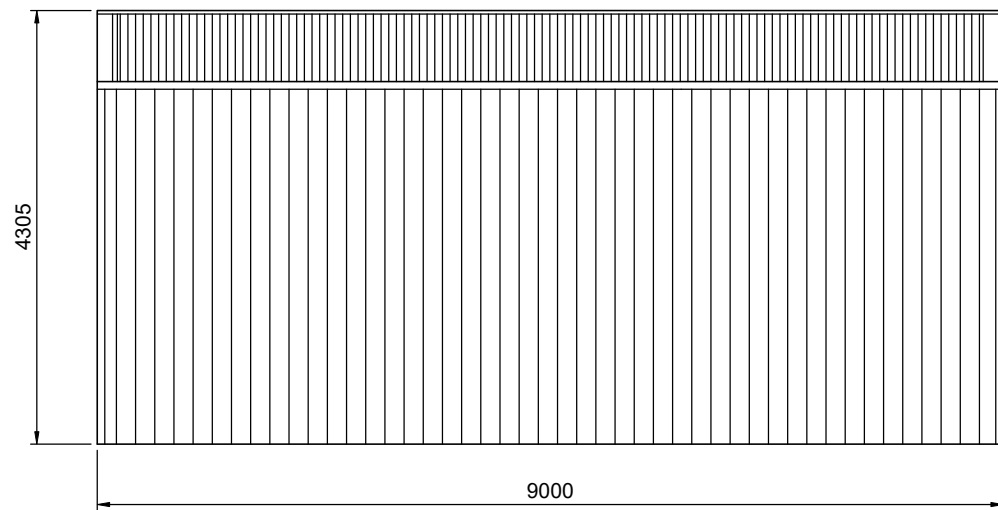
DATE 08-10-2025
JOB NO. LINV1017216533
SHEET 1 of 9



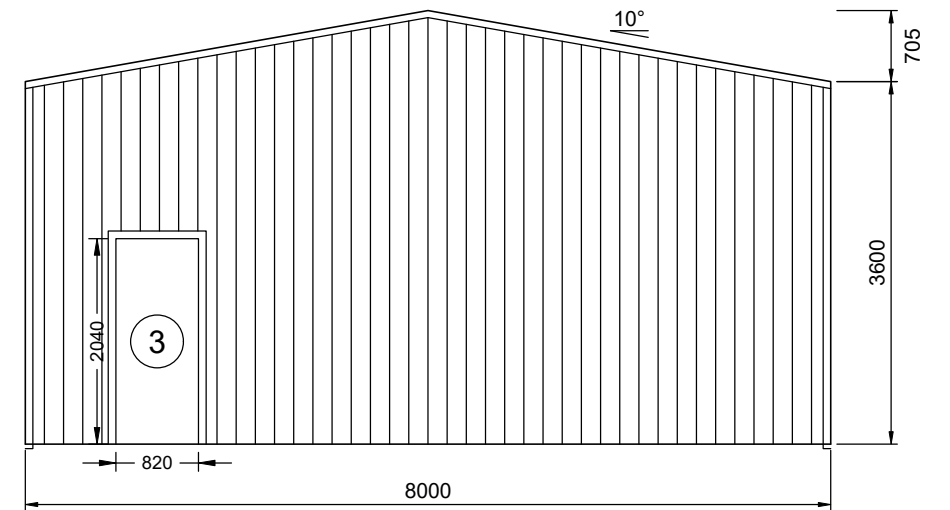
2 SIDEWALL B BUILDING ELEVATION
2 SCALE: 1:75



3 REAR BUILDING ELEVATION
2 SCALE: 1:75

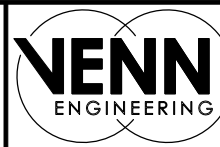


1 SIDEWALL A BUILDING ELEVATION
2 SCALE: 1:75



4 FRONT BUILDING ELEVATION
2 SCALE: 1:75

REV	DATE	DESCRIPTION
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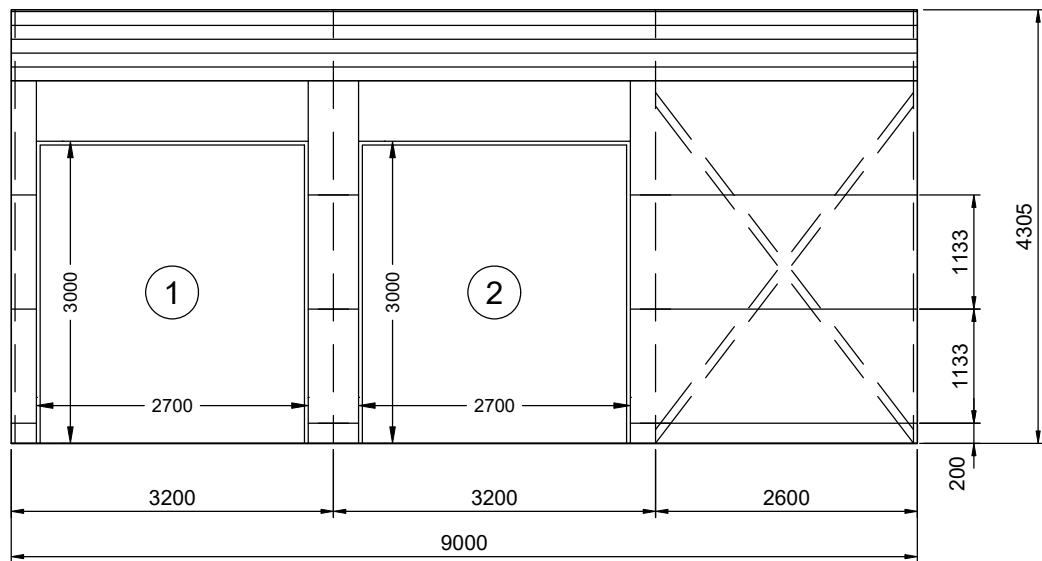


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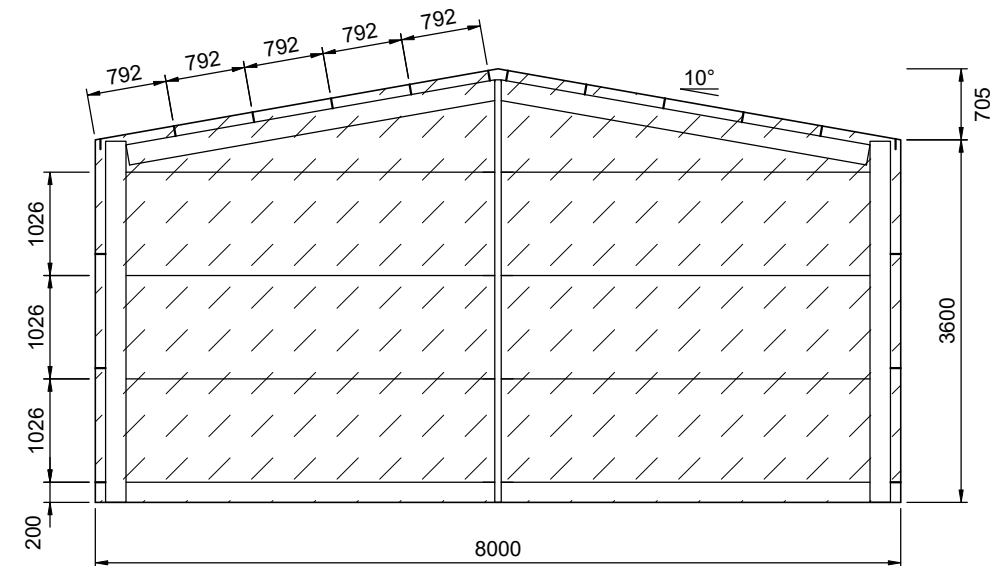
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 SHEET 2 of 9



2 SIDEWALL B FRAMING ELEVATION
3 SCALE: 1:75

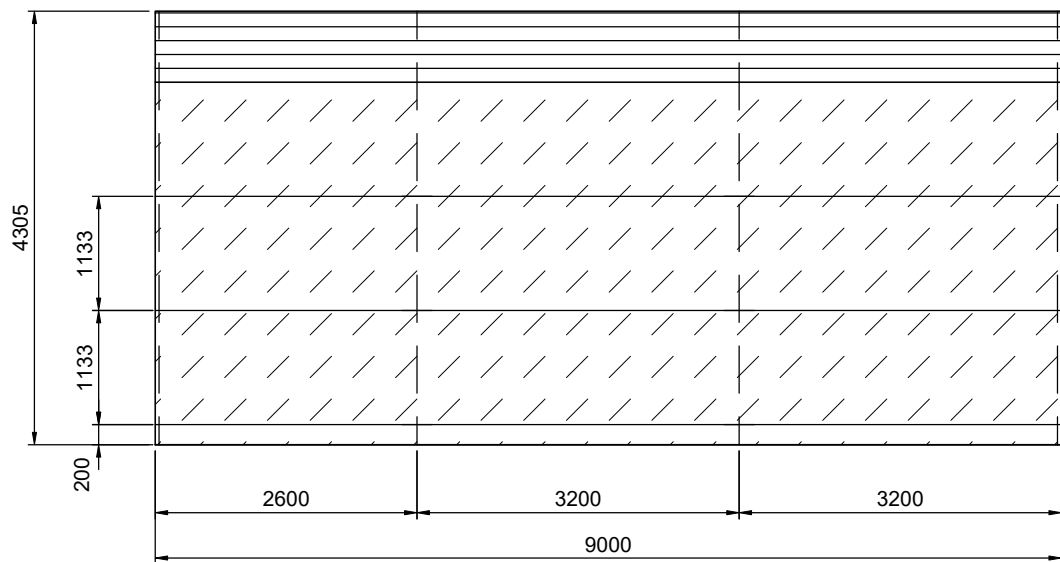


3 REAR FRAMING ELEVATION
3 SCALE: 1:75

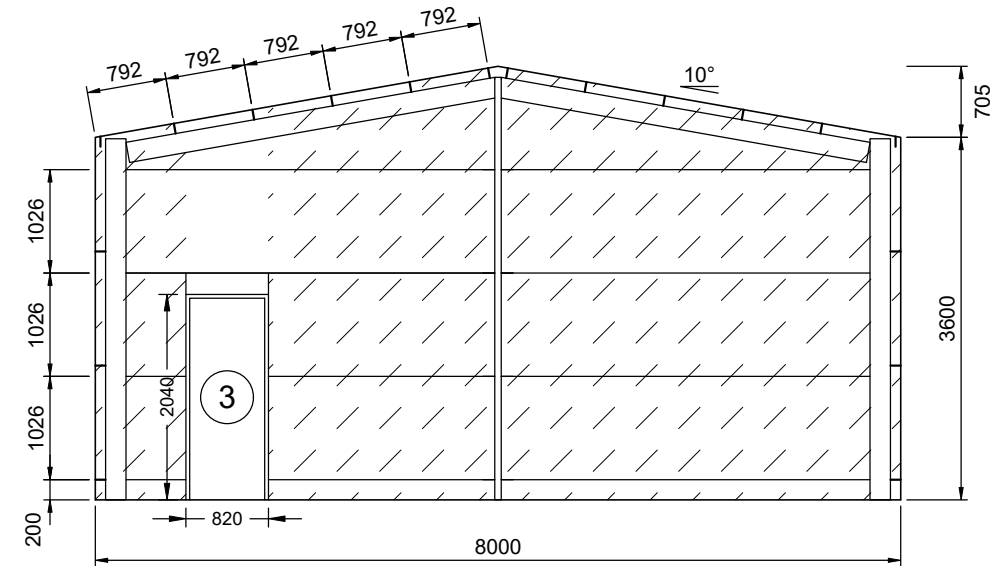
FRAME #4

DIAPHRAGM SCHEDULE
 SHEETING IN DIAPHRAGM SECTIONS (SHOWN AS HATCHED AREA ON ELEVATIONS) NOT TO BE CUT UNDER ANY CIRCUMSTANCES

WALL	DISTANCE FROM WALL EDGE
Sidewall 'A'	0-9000
Endwall 'A'	0-6280 7100-8000
Endwall 'B'	0-8000



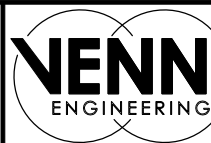
1 SIDEWALL A FRAMING ELEVATION
3 SCALE: 1:75



4 FRONT FRAMING ELEVATION
3 SCALE: 1:75

FRAME #1

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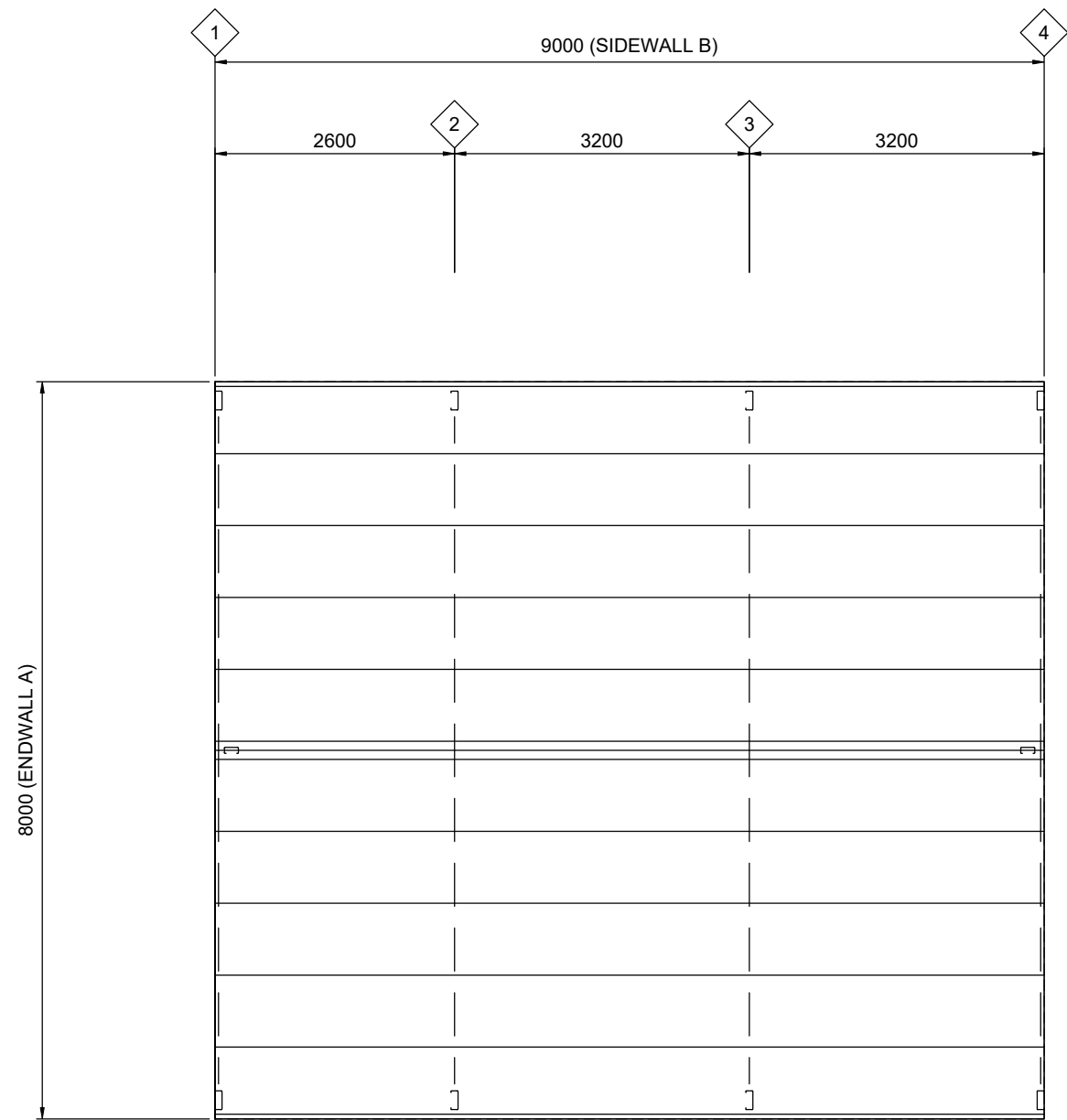
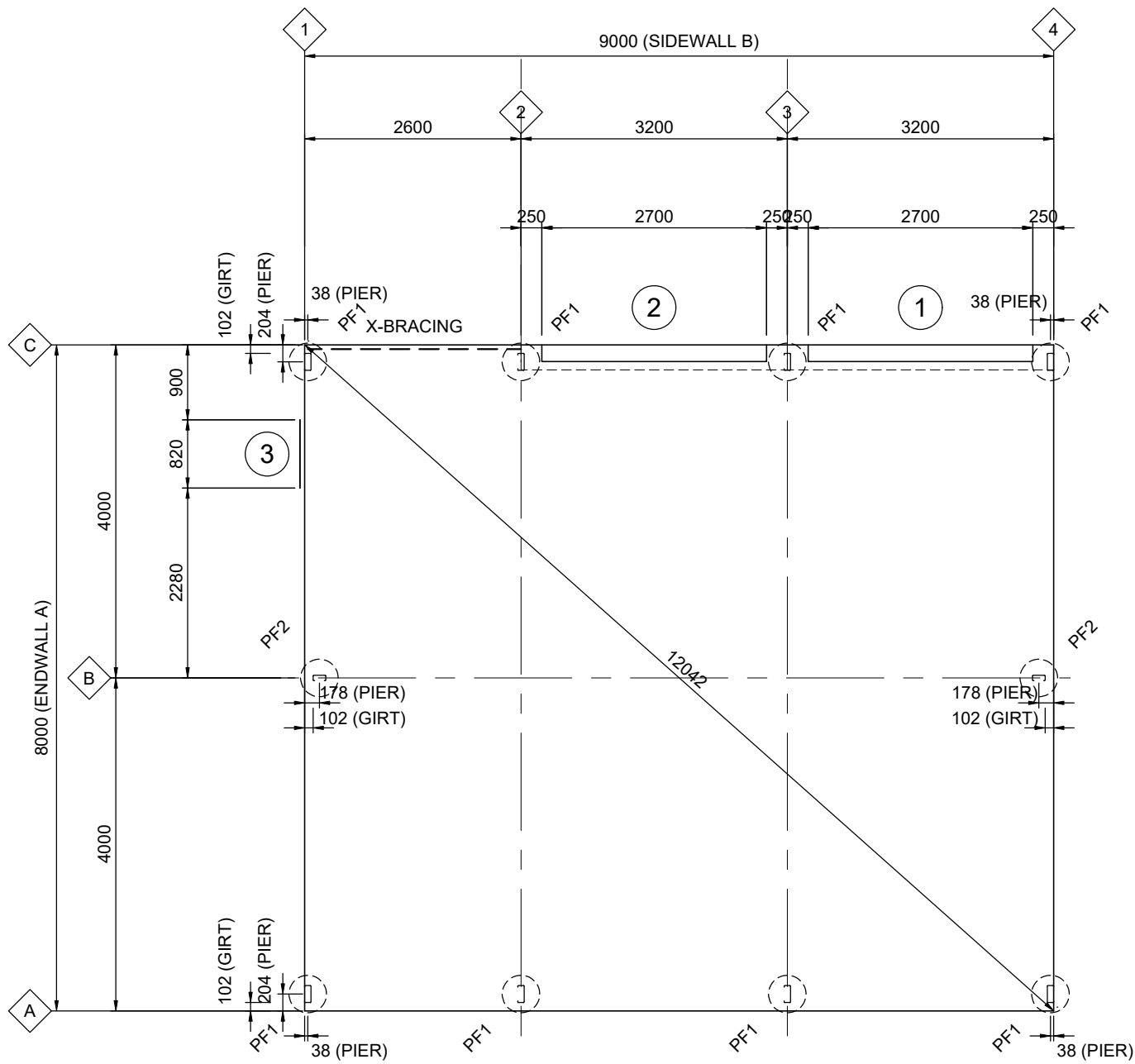


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 SHEET 3 of 9



1 FOOTING/SLAB FLOOR PLAN
4 SCALE: 1:75 PF1 - 450Ø REINFORCED CONCRETE PIERS TO DETAIL
 PF2 - 450Ø REINFORCED CONCRETE PIERS TO DETAIL

SLAB IS DESIGNED FOR CARS AND LIGHT VANS
 NOT EXCEEDING 3500kg GROSS MASS

CONCRETE CONTROL JOINTS SHALL BE PROVIDED IN SLAB TO DETAIL AT
 NOT MORE THAN 10m CENTRES IN EACH DIRECTION, APPROXIMATELY
 EQUALLY SPACED AND LOCATED APPROXIMATELY MIDWAY BETWEEN
 COLUMNS/MULLIONS

2 ROOF FRAMING PLAN
4 SCALE: 1:75

ROOF SHEETING IS USED AS DIAPHRAGM TO BRACE THE
 BUILDING AND IS NOT TO BE CUT UNDER ANY CIRCUMSTANCES

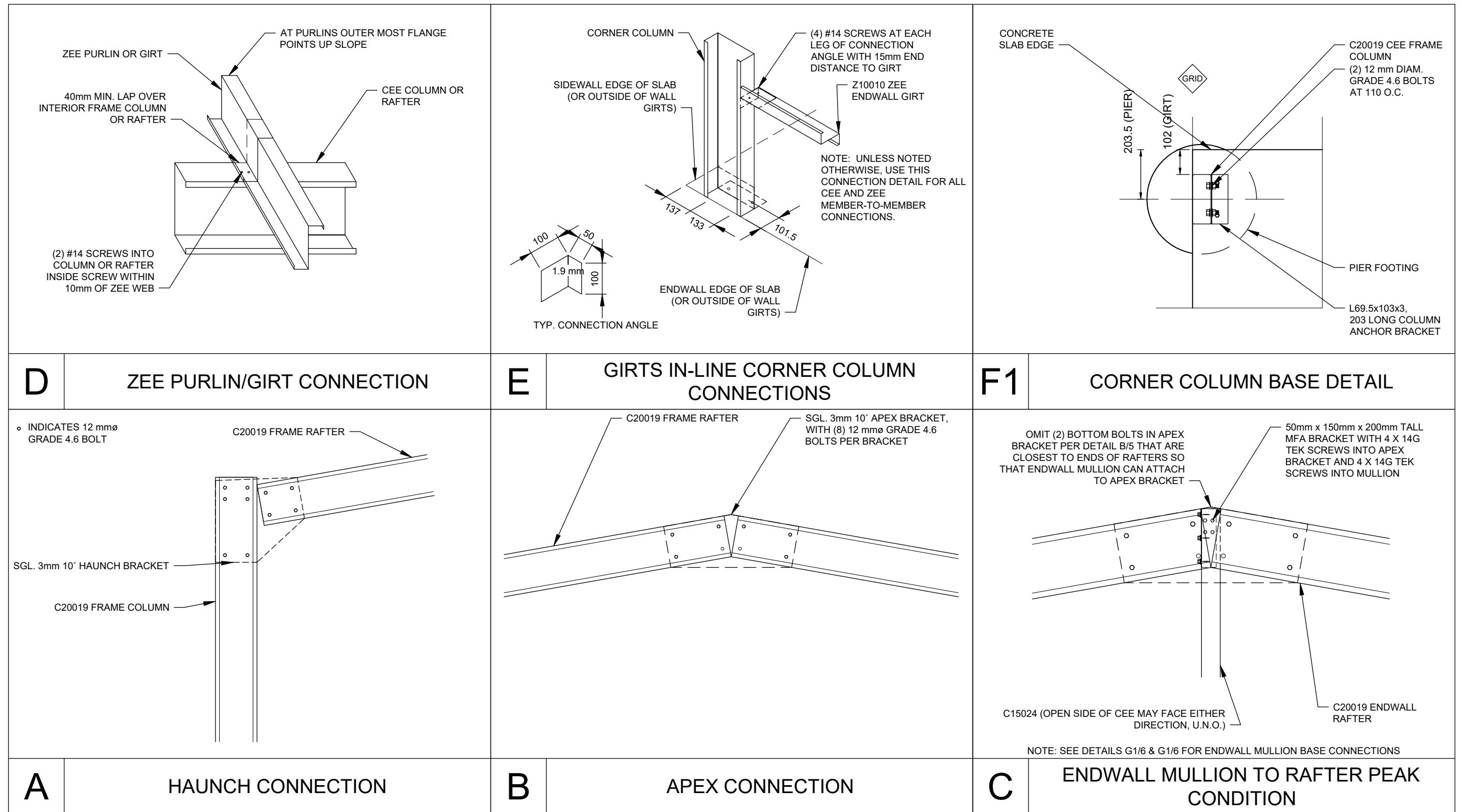
REV	DATE	DESCRIPTION
A	08-10-2025	-



Signed *[Signature]* Date 08-10-2025
 Grant J Wood MIEAust CPEng NER RPEQ
 Registered EA Chartered Professional Engineer (No. 2383009)
 Registered Professional Engineer QLD (No. 14384)
 Registered Civil Engineer Building Practitioner VIC (No. PE0002499)
 Registered Certifying Engineer (structural) NT (No. 306371ES)
 Building Services Provider (Engineer Civil) TAS (No. 69030425)

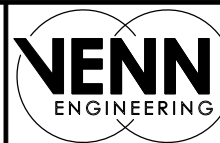
Customer Name: Travis Gray
 Site Address: 87 King St
 Westbury,
 TAS, 7303

DATE 08-10-2025
 JOB NO. LINV1017216533
 SHEET 4 of 9



DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
A	08-10-2025	-

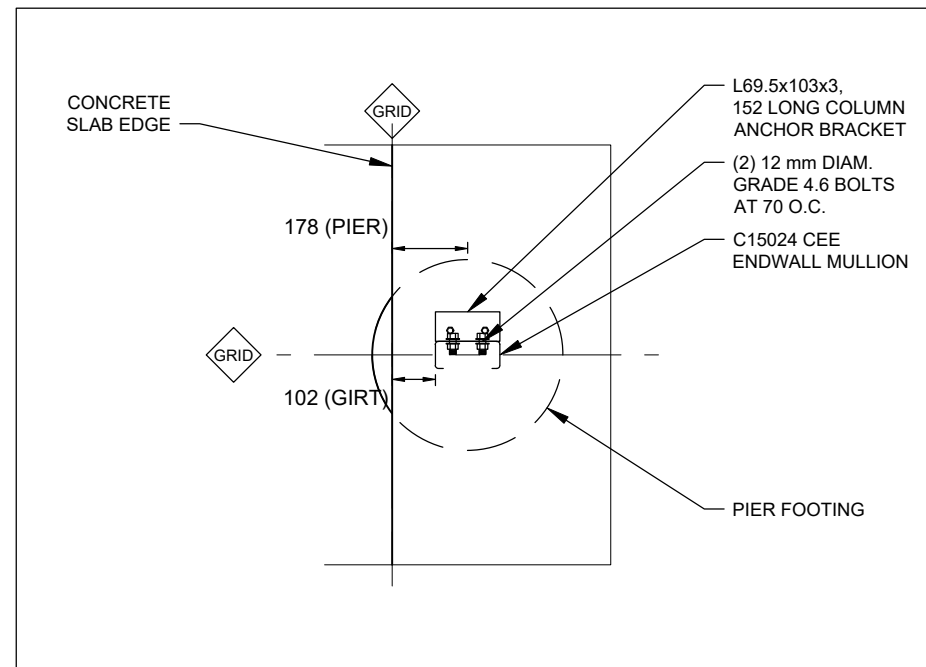


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 sheds@venn.engineering
 ABN 39 626 802 257

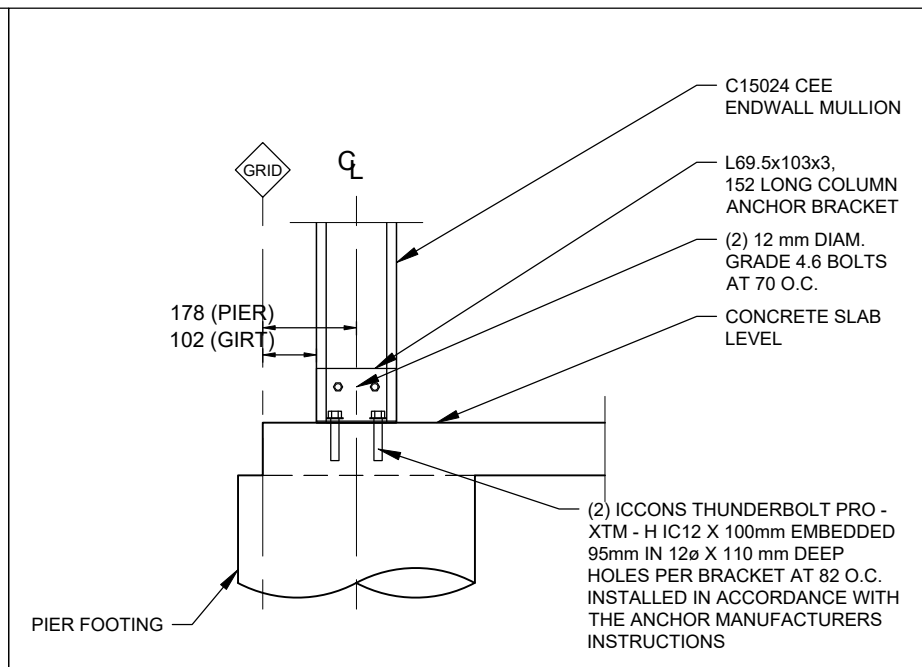
Signed *[Signature]* Date 08-10-2025
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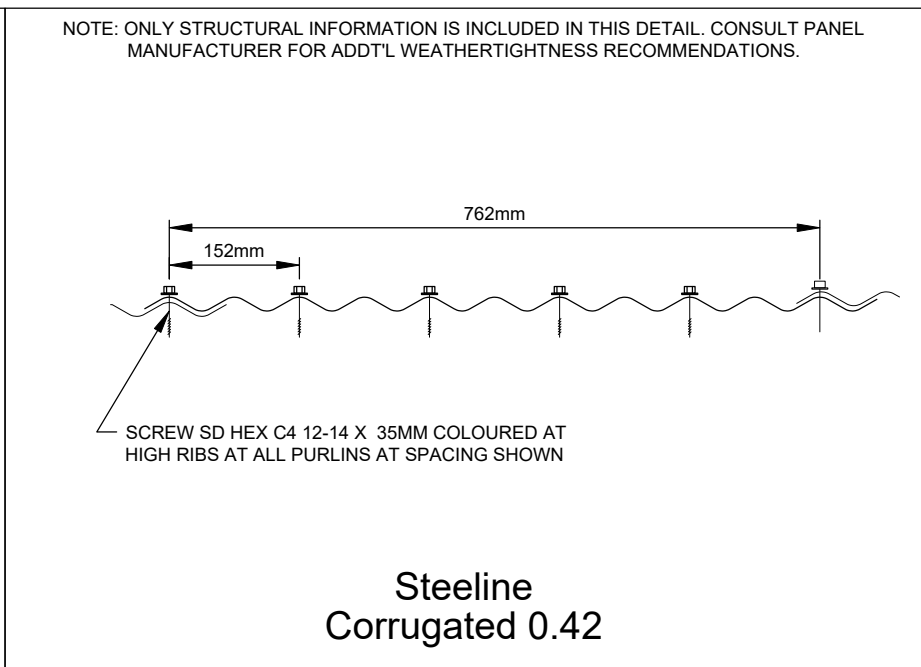
DATE 08-10-2025
 JOB NO. LINV1017216533
 SHEET 5 of 9



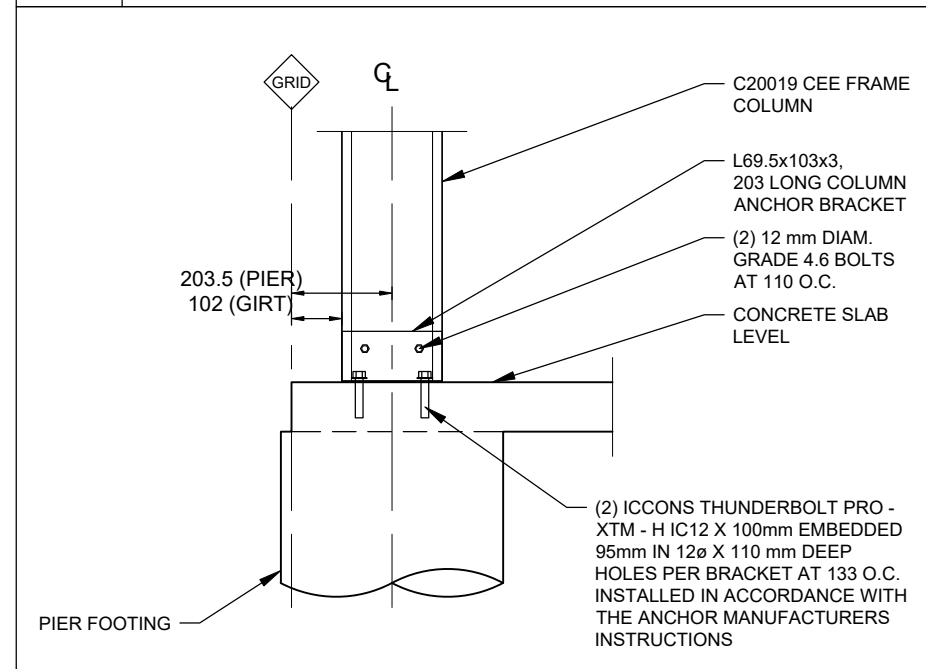
G1 ENDWALL MULLION BASE DETAIL



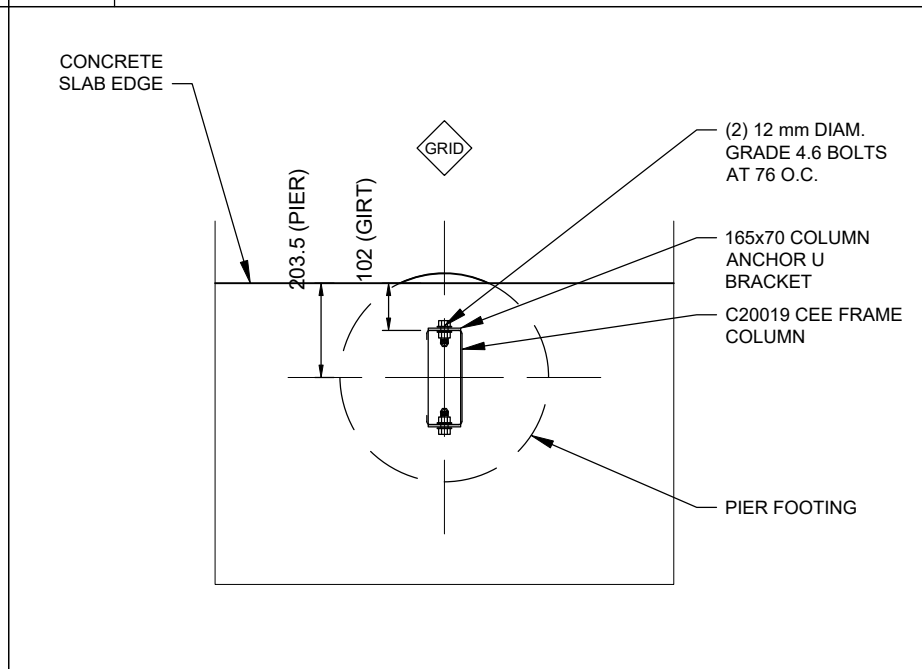
G2 ENDWALL MULLION BASE DETAIL 2



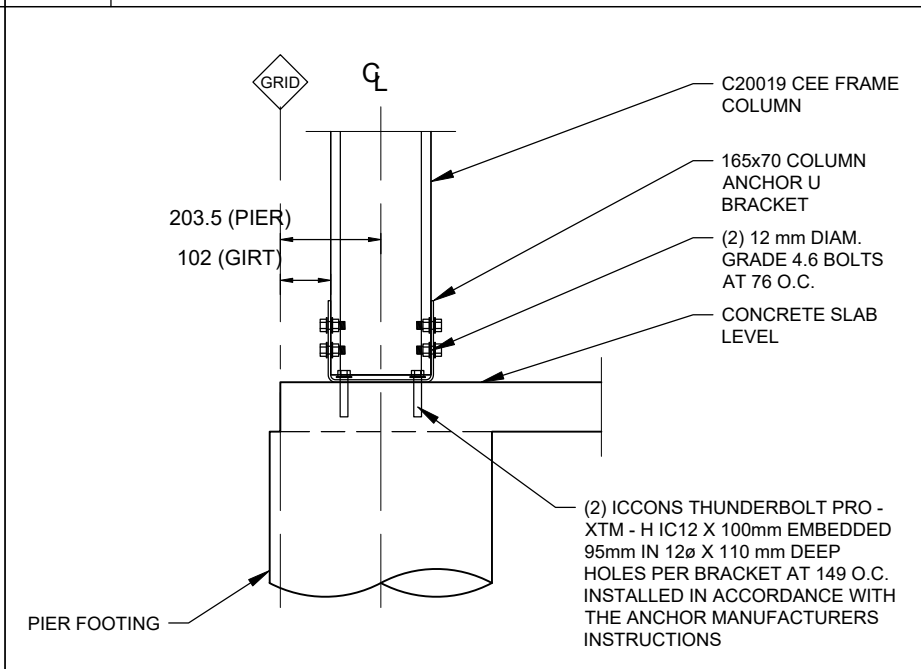
H ROOF SHEETING



F2 CORNER COLUMN BASE DETAIL 2



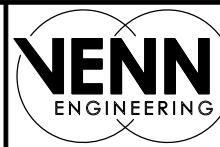
F3 FRAME COLUMN BASE DETAIL



F4 FRAME COLUMN BASE DETAIL 2

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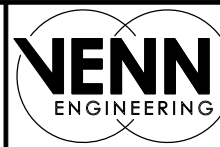
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JOB NO. LINV1017216533
SHEET 6 of 9

<p>K1 OPENING CHANNEL JAMB GIRT CONNECTION</p>	<p>K2 OPENING ZEE JAMB GIRT CONNECTION</p>	<p>L1 CHANNEL JAMB TO HEADER GIRT CONNECTION</p>
<p>NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADDT'L WEATHERTIGHTNESS RECOMMENDATIONS.</p> <p style="text-align: center;">Steeline Steelclad 0.42</p>		
<p>I WALL SHEETING</p>	<p>J1 PA DOOR JAMB BASE CONNECTION</p>	<p>J2 ROLLER DOOR JAMB BASE CONNECTION</p>

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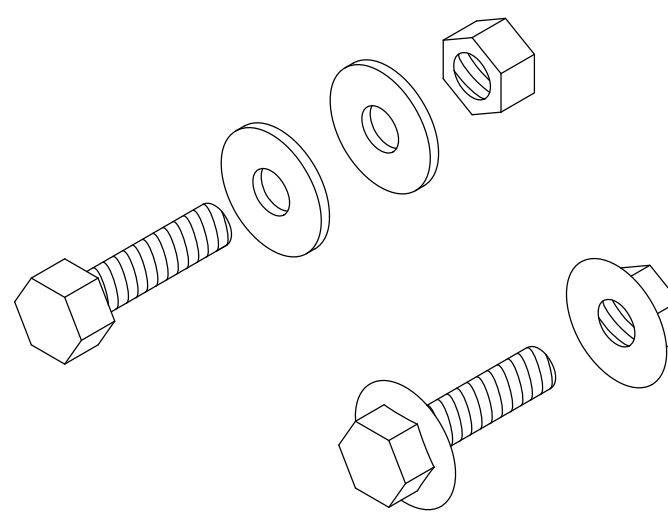
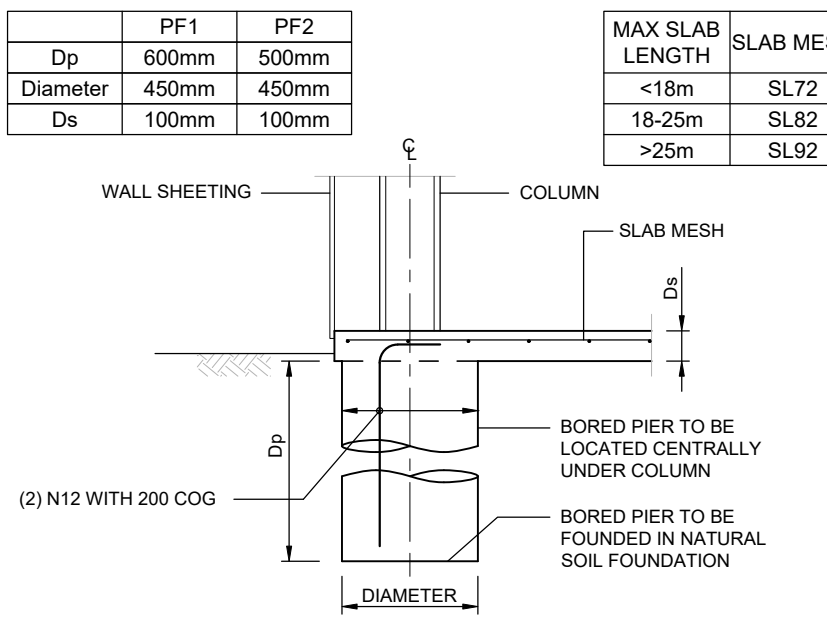
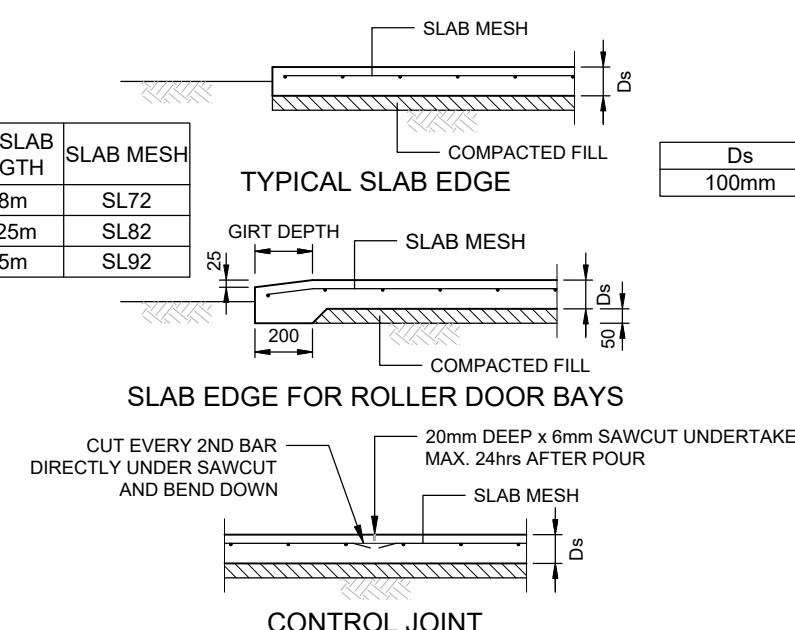
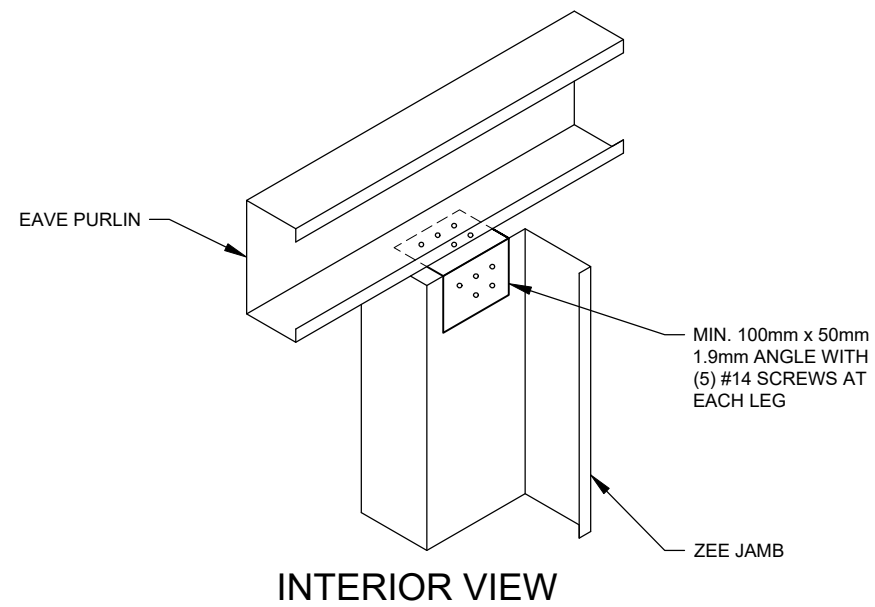
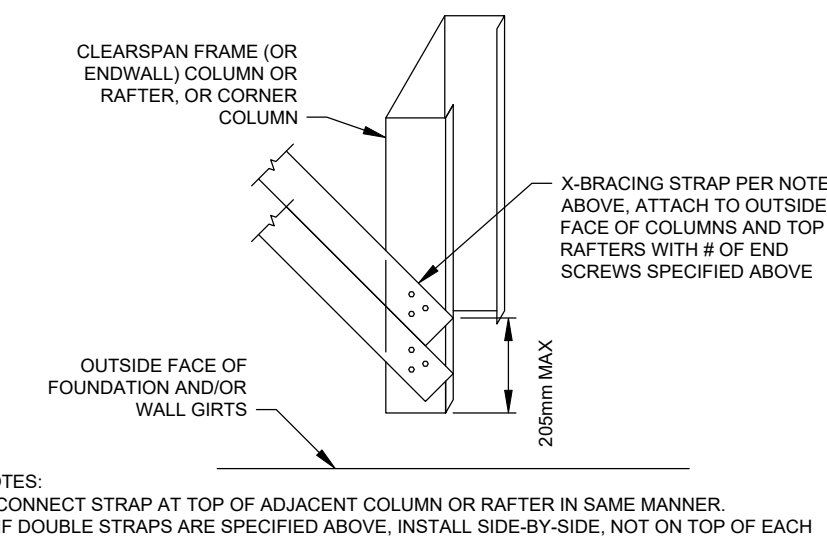
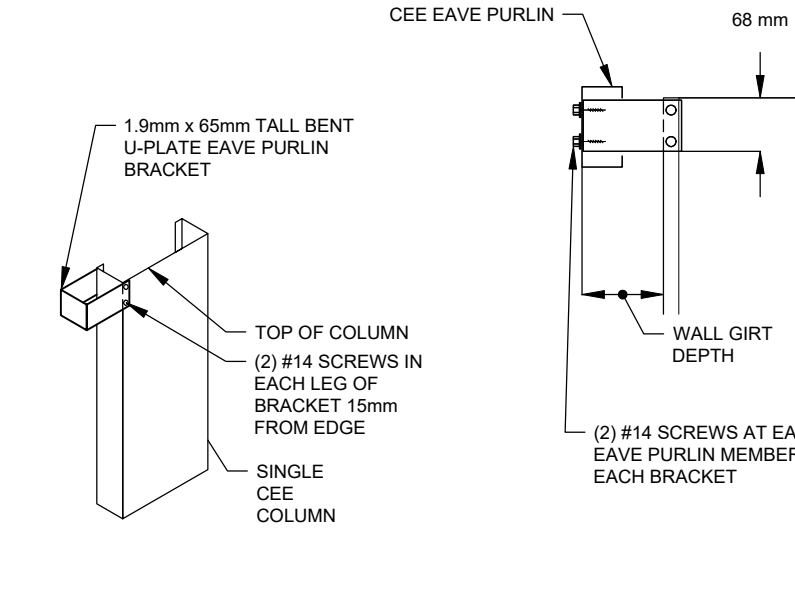


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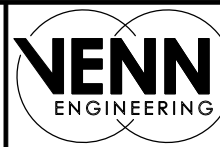
Customer Name: Travis Gray
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TAS, 7303

DATE 08-10-2025
JOB NO. LINV1017216533
SHEET 7 of 9

<p>ALL NUTS AND BOLTS TO HAVE WASHER OR FLANGED HEADS</p> 	<table border="1" style="float: left; margin-right: 20px;"> <tr><td></td><td>PF1</td><td>PF2</td></tr> <tr><td>Dp</td><td>600mm</td><td>500mm</td></tr> <tr><td>Diameter</td><td>450mm</td><td>450mm</td></tr> <tr><td>Ds</td><td>100mm</td><td>100mm</td></tr> </table> <table border="1" style="float: right; margin-left: 20px;"> <tr><td>MAX SLAB LENGTH</td><td>SLAB MESH</td></tr> <tr><td><18m</td><td>SL72</td></tr> <tr><td>18-25m</td><td>SL82</td></tr> <tr><td>>25m</td><td>SL92</td></tr> </table> 		PF1	PF2	Dp	600mm	500mm	Diameter	450mm	450mm	Ds	100mm	100mm	MAX SLAB LENGTH	SLAB MESH	<18m	SL72	18-25m	SL82	>25m	SL92	<table border="1" style="float: left; margin-right: 20px;"> <tr><td>MAX SLAB LENGTH</td><td>SLAB MESH</td></tr> <tr><td><18m</td><td>SL72</td></tr> <tr><td>18-25m</td><td>SL82</td></tr> <tr><td>>25m</td><td>SL92</td></tr> </table> 	MAX SLAB LENGTH	SLAB MESH	<18m	SL72	18-25m	SL82	>25m	SL92
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<p>T BOLT OPTIONS</p>	<p>Y SLAB WITH PIER FOOTING DETAIL</p>	<p>Z SLAB DETAIL</p>																												
 <p>INTERIOR VIEW</p>	<p>ENDWALL: N/A SIDEWALLS & ROOF: DBL. 30MM 1MM STRAP WITH (3) #14 SCREWS AT EACH END OF EACH STRAP</p>  <p>NOTES: 1) CONNECT STRAP AT TOP OF ADJACENT COLUMN OR RAFTER IN SAME MANNER. 2) IF DOUBLE STRAPS ARE SPECIFIED ABOVE, INSTALL SIDE-BY-SIDE, NOT ON TOP OF EACH OTHER.</p>																													
<p>L2 ZEE JAMB TO EAVE PURLIN CONNECTION</p>	<p>M ROOF AND WALL X-BRACING CONNECTION</p>	<p>O EAVE PURLIN BRACKET</p>																												

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
A	08-10-2025	-

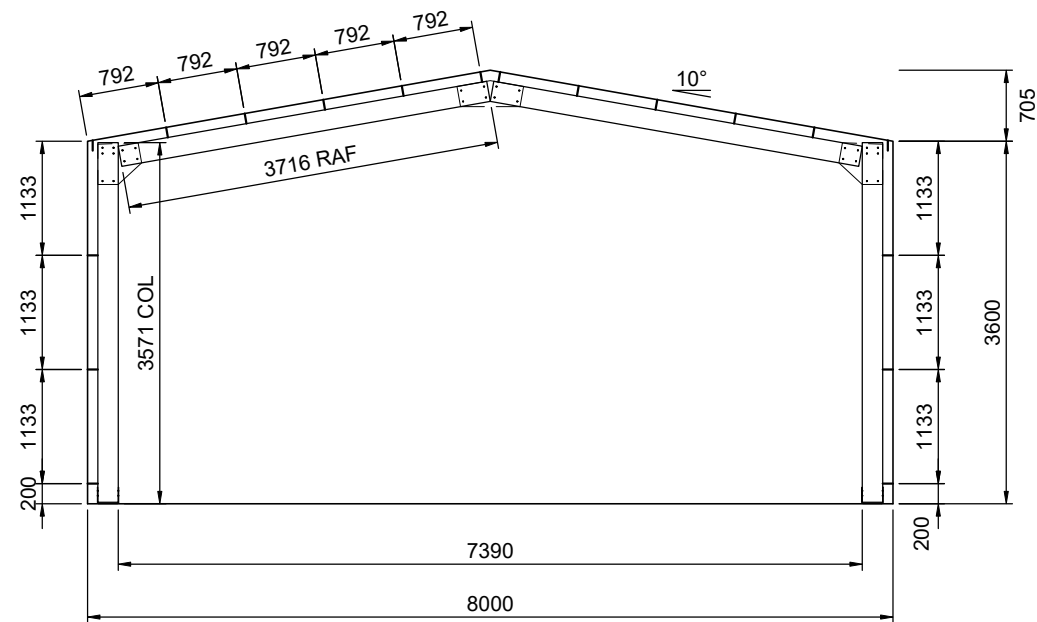


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DATE 08-10-2025
JOB NO. LINV1017216533
SHEET 8 of 9



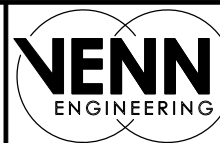
1 INTERNAL FRAMING ELEVATION
9 SCALE: 1:75 FRAMES 2, 3

MEMBER SCHEDULE			
COMPONENT	MEMBER	TYPE	
CLEAR SPAN PORTAL (FRAMES 2, 3)	MEMBER	RAFTER	Single C20019
		COLUMN	Single C20019
		APEX BRACE	-
		KNEE BRACE	-
BASE CONNECTION	BRACKET TYPE	Base cleat bolt down bracket BC.200V2	
	ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm	
ENDWALL PORTAL (FRAMES 1, 4)	MEMBER	RAFTER	Single C20019
		COLUMN	Single C20019
		APEX BRACE	-
		KNEE BRACE	-
BASE CONNECTION	BRACKET TYPE	Angle base connection ABC.C200.110	
	ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm	
ENDWALL MULLION	MEMBER	COLUMN	Single C15024
	BASE CONNECTION	BRACKET TYPE	Angle base connection ABC.C150.70
	ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm	
ROOF PURLINS	MEMBER	Single Z10010 @ 792mm centres	
EAVE PURLIN	MEMBER	Single C10015	
SIDEWALL GIRTS	MEMBER	Single Z10010 @ 1133mm centres	
ENDWALL GIRTS	MEMBER	Single Z10010 @ 1026mm centres	
OPENINGS (1-2)	MEMBER	JAMB	Single Z15012
		HEADER/SILL	Single C10015
	BASE CONNECTION	BRACKET TYPE	Angle base connection ABC.C150.70
	ANCHOR BOLTS	(2) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm	
OPENING (3)	MEMBER	JAMB	Single Unlipped 102 x 1.5 Cee
		HEADER/SILL	Single C10015
	BASE CONNECTION	BRACKET TYPE	Angle base connection ABC.SINGLE
	ANCHOR BOLTS	(1) ICCONS ThunderBolt Pro - XTM - H IC12 x 100mm embedded 95mm	
X-BRACING	STRAP	(2) 30mm x 1.0 strap	

REV	DATE	DESCRIPTION
A	08-10-2025	-



ANOTHER
COLD FORMED BUILDING
DESIGNED BY
ACT BUILDING SYSTEMS



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ABN 39 626 802 257

Signed *[Signature]* Date 08-10-2025

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JOB NO. LINV1017216533
SHEET 9 of 9

Generic Temporary Bracing Information

The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials

The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.

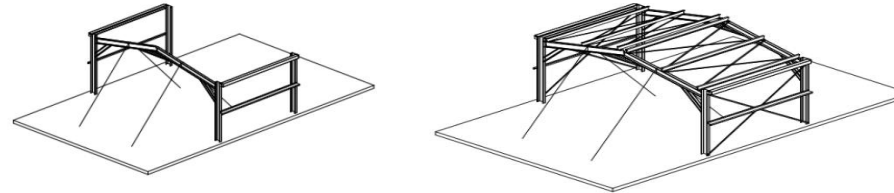
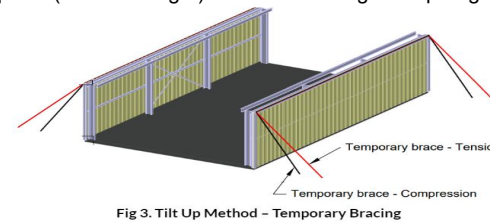


Fig 1. Frame First Temporary Bracing on First Rafter Installed Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground and then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.



Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

Bracing Removal

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/> 'Construction work – steel erection. Information sheet', 2016.

<https://www.steel.org.au/> 'Structural steelwork fabrication and erection code of practice', 2014.

<https://www.standards.org.au/> AS/NZS 5131:2016 'Structural steelwork – Fabrication and erection.

Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: *Owner name*
 Address
 Suburb/postcode

Designer details:

Name: *Category:*
 Business name: *Phone No:*
 Business address:
 Fax No:
 Licence No: *Email address:*

Details of the proposed work:

Owner/Applicant *Designer's project reference No.*
Address: *Lot No:*

Type of work: Building work Plumbing work *(X all applicable)*

Description of work:

New class 10a building (non-habitable shed) with importance Ivl 2 of size 8.000m span x 9.000m long x 3.600m eaves height. The building consists of cold formed steel framing members and cladding along with reinforced concrete pavement slab on ground where shown.

(new building / alteration / addition / repair / removal / re-erection / water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input checked="" type="checkbox"/>		Performance Solution: <input type="checkbox"/> <i>(X the appropriate box)</i>

Other details:

The design complies with the following deemed-to-satisfy parts of 2022 NCC-BCA Vol. 2 & Housing Provisions:

- Part H1D4(1)(a)(ii) for resistance of concrete (AS3600)
- Housing provision 2.2.4 for resistance of fastenings in concrete (AS5216)
- Part H1D6(3)(c) for resistance of cold-formed steel members (AS/NZS4600)
- Housing provision 2.2.3(a), (b) & (c) for the following actions to AS/NZS1170 parts 1 to 4:
 - o Imposed: 2.5 kPa to slab (light vehicles) where slab is shown
 - o Wind: Importance level 2, Region A4, Terrain Cat. 2.39, Topographic (Mt) 1.00, Shielding (Ms) 0.90 and Site wind speed (V_{sit,β}) 35.60 m/s
 - o Snow: 0.00 kpa
 - o Earthquake: Design category I

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
LINV1017216533 sheets 1 to 9 revision A	Venn Engineering Pty Ltd	08/10/2025
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:


2022 National Construction Code – Building Code of Australia Volume 2 & Housing Provisions
 Australian Standard for Structural design Actions parts 0, 1, 2, 3 & 4 (AS/NZS 1170)
 Australian Standard for Cold-formed Steel Structures (AS/NZS 4600:2018)
 Australian Standard for Concrete Structures (AS 3600:2018)
 Australian Standard for Post-installed Fasteners in Concrete (AS 5216:2021)
 Australian Steel Institute Design Guide Portal Frame Steel Sheds and Garages 2nd edition June 2014

Any other relevant documentation:**Attribution as designer:**

I, Grant Wood, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Grant Wood		08/10/2025
Licence No:	690930425		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater’s sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater’s infrastructure
- The works will not damage or interfere with TasWater’s works
- The works will not adversely affect TasWater’s operations
- The work are not within 2m of TasWater’s infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater’s water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<input type="text"/>	<input type="text"/>	<input type="text"/>