

ENGINEERING SCHEDULE

CERTIFIED STEEL PORTAL FRAME SHED DESIGN IN ACCORDANCE WITH NCC 2022 FOR SITE WIND SPEED "41.49m/s" , WIND REGION "A0", TERRAIN CATEGORY "2", IMPORTANCE LEVEL "2"

Internal Pressure: 0.5
Design Snow Load: 0.00 KPa, Roof Snow Load: 0.00 KPa

Customer: Tara Clarke
Site Address: 919 Spring Ridge Rd, Beryl NSW 2852

Main Building: Span: 12, Length: 24, Height: 5, Roof Pitch: 11 degrees
The length being comprised of 4 bays, the largest bay is 6m bays.
Left LeanTo: NA
Right LeanTo: Span: 6, Length: 24, Eave Height: 4.475, Roof Pitch: 5 degrees, Open

Total Kit Weight: 9815.08kg

INTERNAL PORTALS	END PORTALS
Column: 2C25024 Rafter: 2C25024 Knee Brace: 2C15015 Knee Brace Length: 2600 Apex Brace: 2C15015 Apex Brace Length: 5200	Column: C25024 Rafter: C25024 Knee Brace: NA Knee Brace Length: NA Apex Brace: NA Apex Brace Length: NA Endwall Mullion: C25024

LEFT LEAN TO PORTALS	RIGHT LEAN TO PORTALS
Internal Column: NA Internal Rafter: NA End Column: NA End Rafter: NA Knee Brace: NA Knee Brace Length: NA	Internal Column: 2C25024 Internal Rafter: 2C25024 End Column: C25024 End Rafter: C25024 Knee Brace: NA Knee Brace Length: NA

NOTE: All unclad intermediate columns are always back to back (refer to drawing: Floor Plan).

PURLINS AND GIRTS		
Eave Purlin: TH120100 Side Wall Girts: TH120100 Front End Wall Girts: TH120100 Back End Wall Girts: TH120100 Roof Purlins: TH120100	Max Spacing: 1250 Max Spacing: 1250 Max Spacing: 1250 Max Spacing: 1250	Overlap: 10% Overlap: 10% Overlap: 10% Overlap: 10%

NOTE: Girt spacing will vary to a maximum 1.25m where window/s are located.

FASTENERS
Sleeve Anchor Bolts: M16x105 Sleeve Anchor Frame Bolts: M16x45 Purlin Assembly Zinc (Mild) Frame Screws: Frame Screw 14x14x22 Cross Bracing Strap: 32mm x 1.2 strap Open Bay Header Height: NA

COLOUR SCHEDULE
Roof Sheets: Mist Green External Wall Sheets: Mist Green Roller Doors: Mist Green Flashings: Mist Green PA Doors: NA Windows: NA

DOMESTIC & LIGHT INDUSTRIAL STEEL PORTAL FRAME SHED STRUCTURES

This structure is designed in compliance with AS4600, AS3600 and AS1170 1 to 4 as Importance Level 2 with a Live Load of 0.25kPa as "Air Leaky Structures" providing stability when openings are prevalent.

The structures are clad with corrugated pre-painted finish, 0.42mm walls and 0.42mm roof (compliant with AS1562.1 Metal) over cold formed 450 to 550mPa galvanized steel C sections primary frames.

Primary framing is fastened together with 4.6 Class galvanized bolts adequately tensioned on ground prior to erection.

Secondary framing steel bracing, with purlins and girts lapped, are all tek fastened to primary steel with a minimum of two (2) teks per connection as specified in details.

All rainwater products are compliant with AS2179.1 (Metal).

ENGINEERING

The undersigning engineer has checked that the design of the structure complies with relevant current Australian Standards as stated above and the following i.e AS4671- 2001 Steel Reinforcing materials, AS3600 - Concrete structures. However, he will not be present during construction, neither will he conduct inspections nor construction supervision.

The class 10a buildings are designed for erection on pad footings or slab based on soil of classification "A"- "P" with minimum bearing capacity 100kPa (i.e. organic soil is to be removed to a suitable material below natural surface).

Where (suitable) fill is required to level the site, it should be placed and compacted in layers of 150mm maximum.

Concrete pad footings and slab supply and placement is to be in compliance with AS2870-2011 Residential Slabs & Footings, AS3600-2009 Concrete Structures for A2 and B2 exposure (i.e. 25mPa strength @ 28 days strength) with recommended slump 75 to 80mm for light pneumatic tyred traffic all trafficable floors.

25mm deep concrete saw cut, to be made into the surface of the concrete slab every 6m in width or length as crack control joints.

For sites where these conditions are considered to be inadequate, a customized foundation design for the structure can be supplied to suit a specific purpose.

CONSTRUCTION

Erection of the structure is to be in compliance with local and state ordinances,

Occupational Health and Safety Regulations and with plans provided.

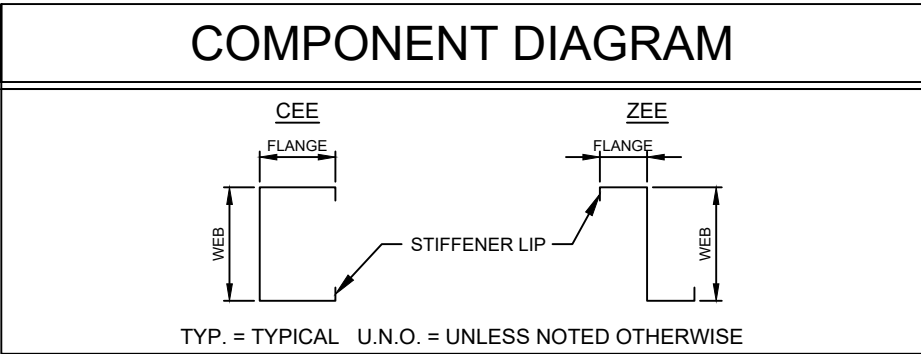
GENERAL

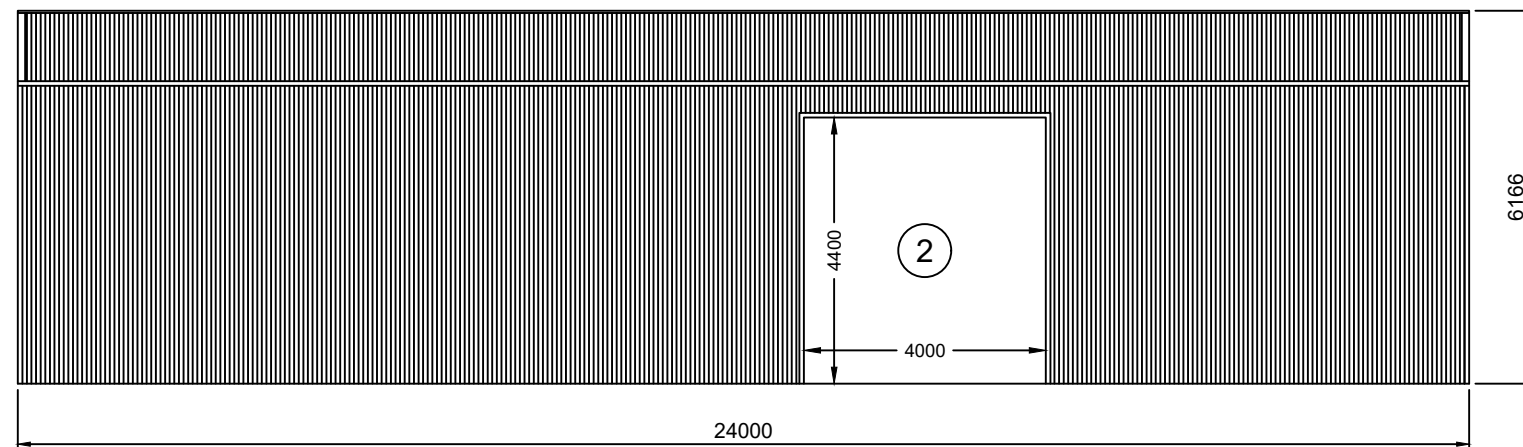
The designs as portrayed on the drawings remain the intellectual property of Best Sheds Pty Ltd and are provided for building approval and construction purposes only.

SNOW LOAD

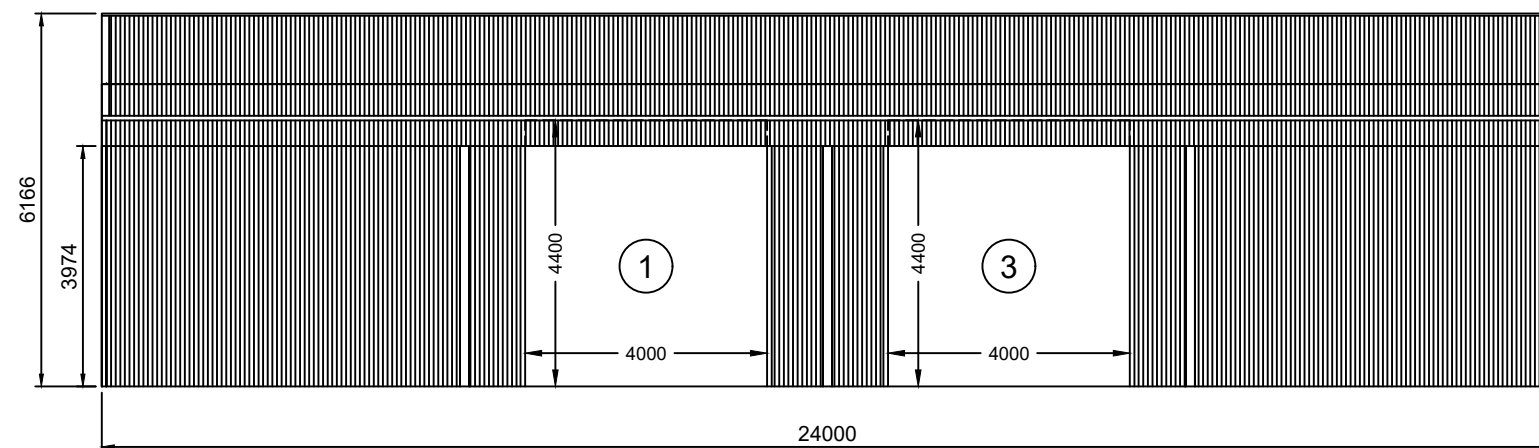
Following conditions only apply to buildings with snow loading:

- No maintenance or roof traffic permitted on the roof while there is snow present.
- No other structure to be erected within 500mm of the gutters of this building.

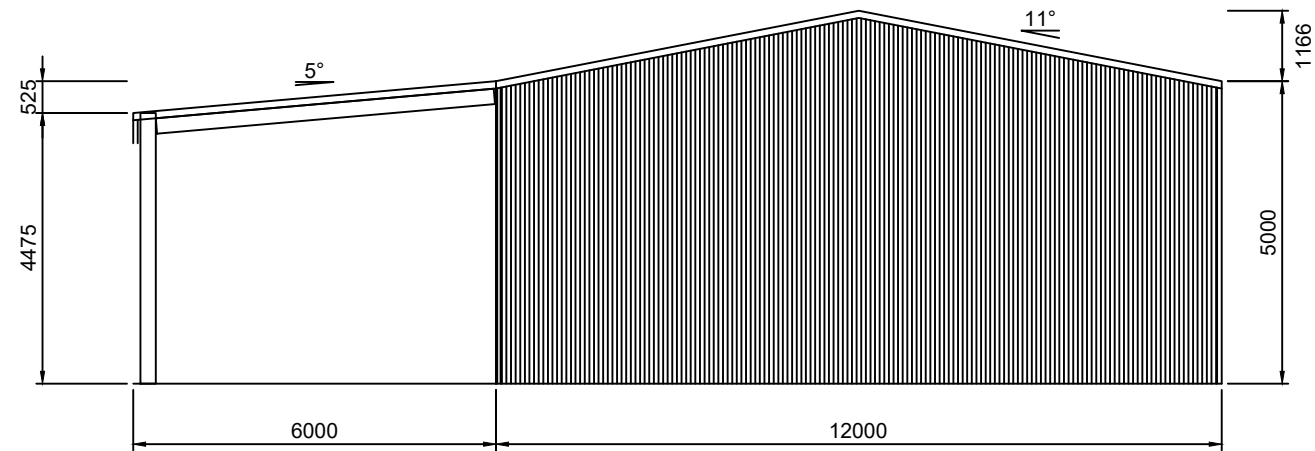




2 LEFT ELEVATION
SCALE: 1:125



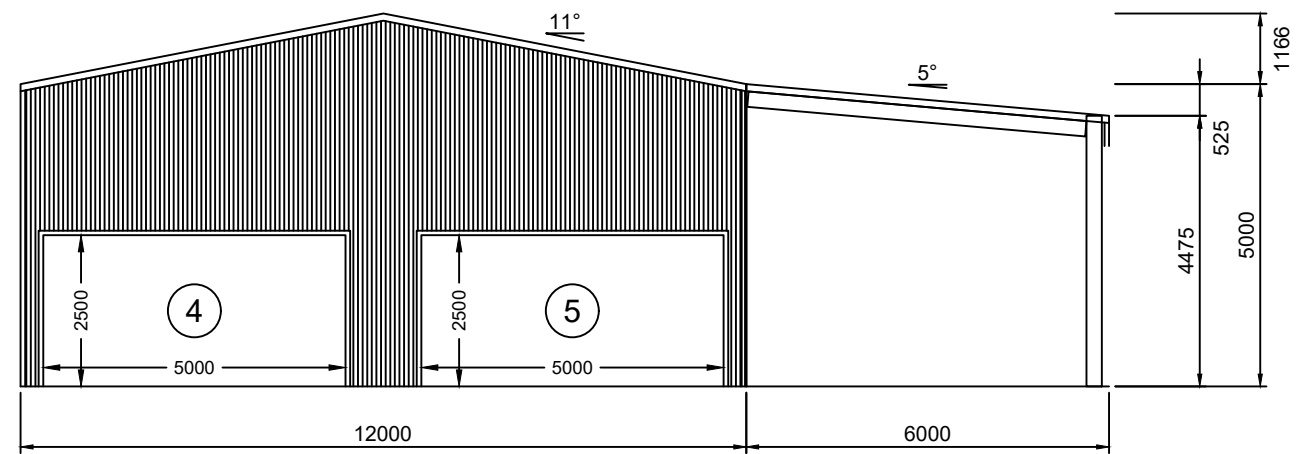
1 RIGHT ELEVATION
SCALE: 1:125



1 REAR ELEVATION
3

SCALE: 1:125

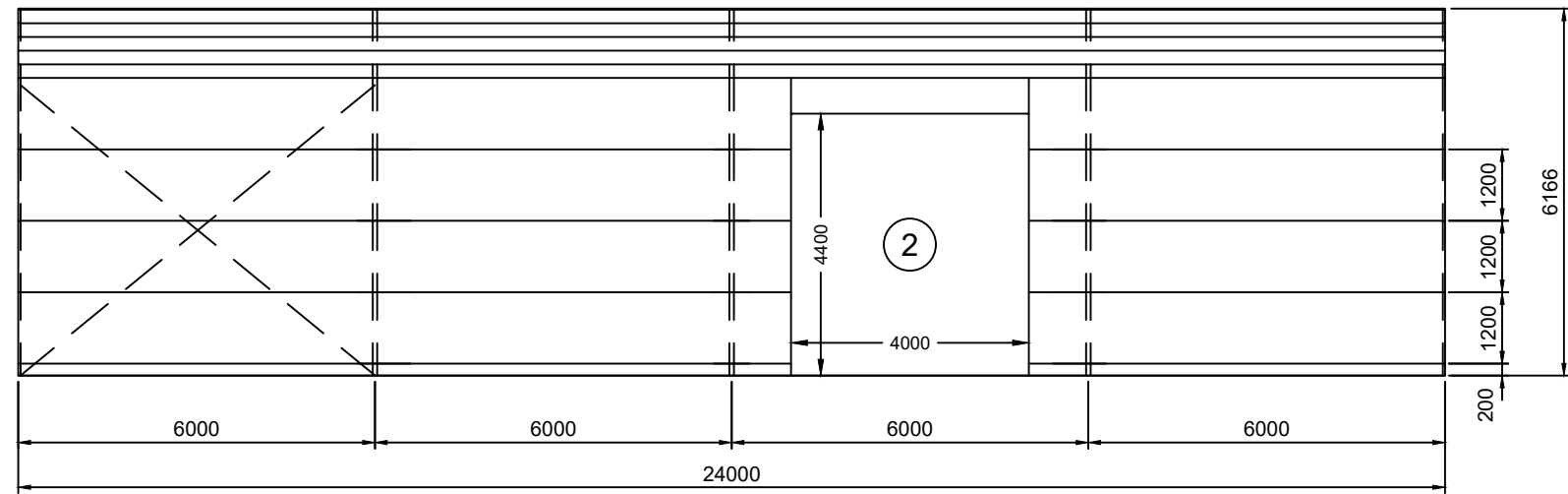
FRAME #5



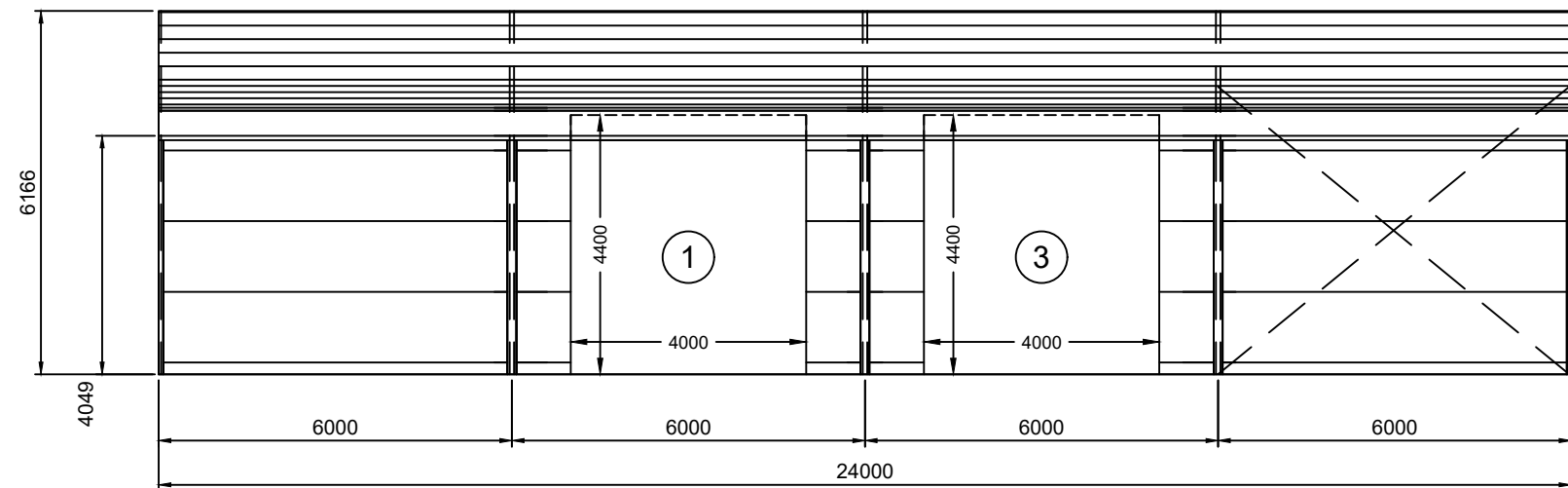
2 FRONT ELEVATION
3

SCALE: 1:125

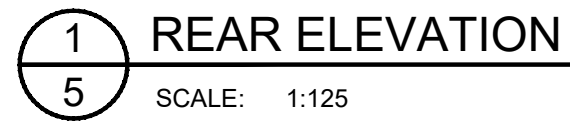
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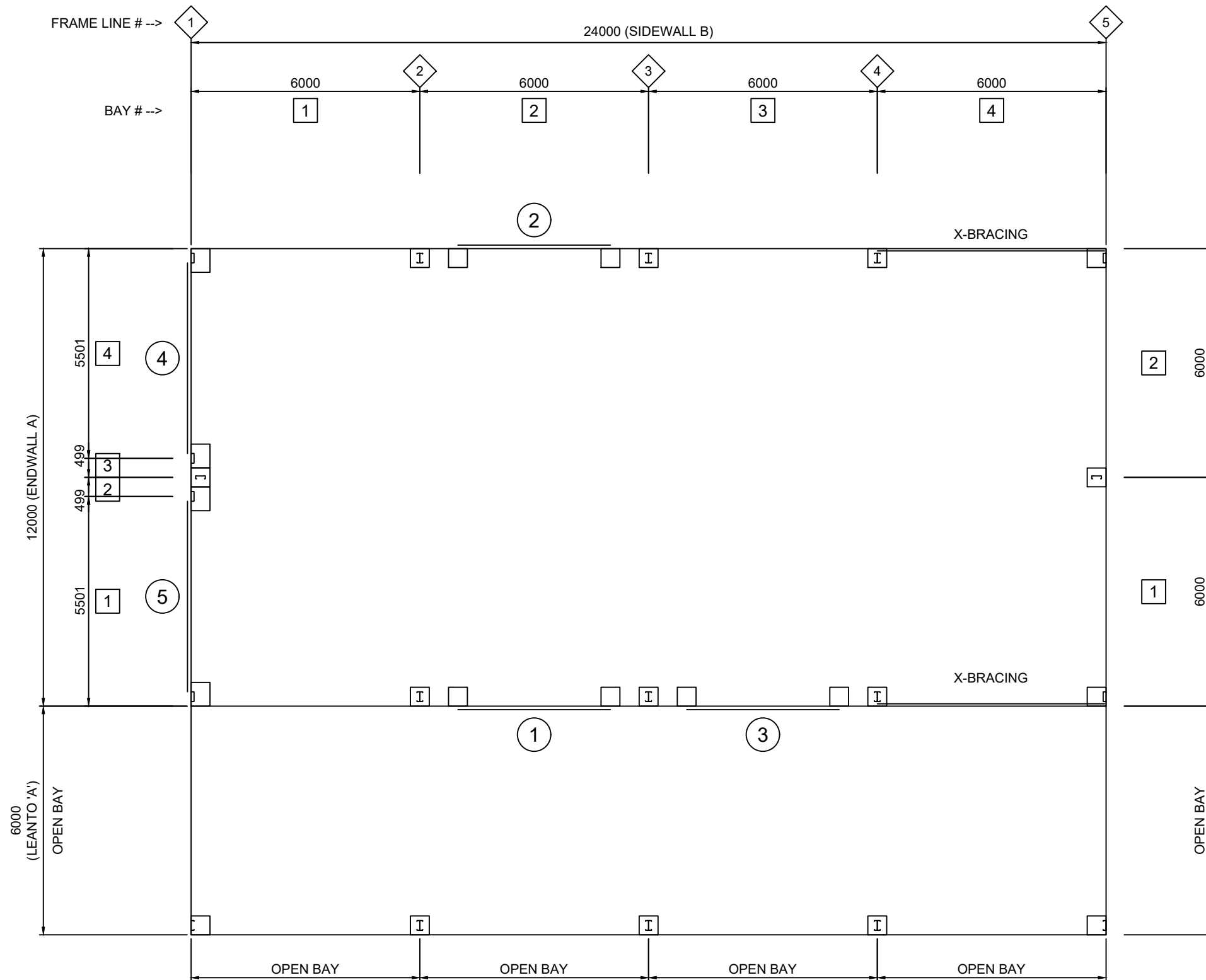


2 LEFT ELEVATION
4 SCALE: 1:125

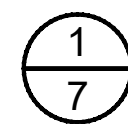
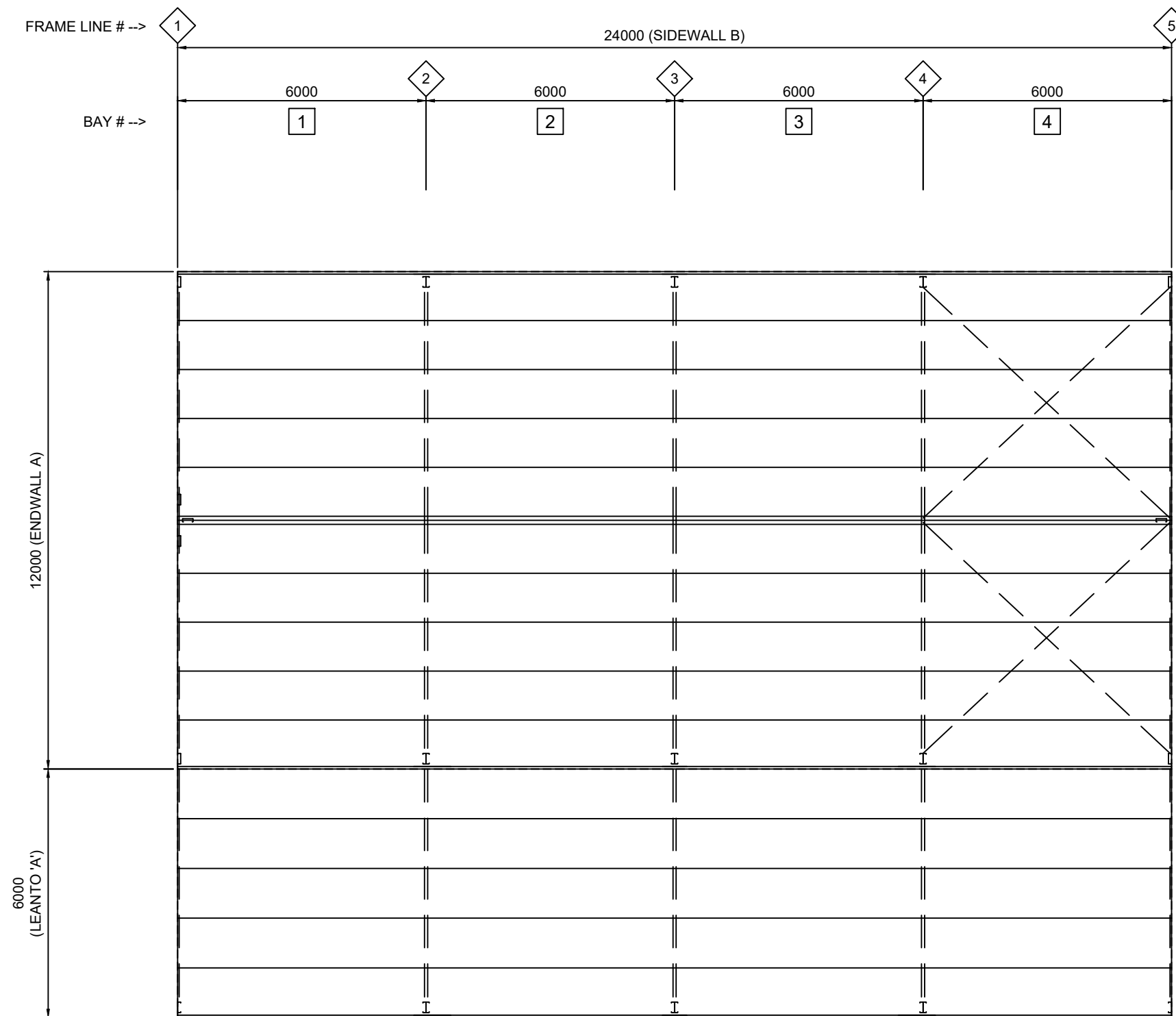


1 RIGHT ELEVATION
4 SCALE: 1:125





1 FLOOR PLAN
6 SCALE: 1:125



ROOF FRAMING PLAN

SCALE: 1:125

SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL
(100mm MINIMUM CONCRETE SLAB INCLUDED)

SOIL CLASSIFICATION (COMPACTED)	REINFORCING IN SLAB	EDGE BEAM	PIER	EDGE BEAM (slab thickness not included)	
	MESH REINFORCING	TRENCH MESH	Ø x DEPTH	DEPTH	WIDTH
A, S, & M	SL72	---	450 x 400	---	---
M - D	SL82	L11TM3	---	300	300
H TO H - D	SL82	L11TM3	---	400	300
E TO E - D	SL82	L11TM4	---	400	400
P (DROP EDGE BEAM OR STANDARD EDGE BEAM WITH PIERS UNDER COLUMNS 300 INTO FIRM GROUND)	SL82	L11TM4	450Ø	400	400

THICKNESS: 100MM WITH MINIMUM 30MM COVER. REFER TO SLAB FOUNDATION TABLE FOR REINFORCING SPECIFICATION

STRENGTH: 25mPa

2 x M16 BOLTS

2 X 16MM DIA SLEEVE ANCHORS, 12MM DIA INTERNAL ROD-MIN 110MM LONG

REFER TO SLAB TABLE FOR MESH TYPE - 30MM COVER

POLYTHENE WATERPROOF MEMBRANE ON CONSOLIDATED SUB-BASE SHOWN DASHED

DEPTH

WIDTH

100

NOTE: ENSURE EARTH/SOIL IS KEPT CLEAR OF WALL CLADDING AT ALL TIMES.

2C25024 COLUMN

1500

600

TOPHAT 64

10G X 16MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY

12G X 35MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY

TOPHAT 120

SHEETING

2 x 14G TEK SCREWS

C25024 COLUMN

FLAT PLATE CONNECTION WITH 12 X 14G TEK SCREWS

C25024 LEANTO RAFTER

DBL. MAIN BUILDING FRAME RAFTER

4623 mm TO TOP OF CONCRETE FOUNDATION

SGL. MAIN BUILDING FRAME COLUMN

NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.

Z

ALTERNATE PIER DETAIL

TOPHAT 120 ROOF PURLIN WITH 10% MINIMUM OVERLAP

12G X 35MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY

C25024 RAFTER

4 X 14G TEK SCREW

H

EAVE CONNECTION

10G X 16MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY

TOPHAT 120 WALL GIRT WITH 10%MM MINIMUM OVERLAP

2 X 14G TEK SCREWS

C25024 COLUMN

Q

LEANTO RAFTER CONNECTION
LEANTO SWA

2 x 14G TEK SCREWS ABOVE & BELOW IN SIDE OF PURLIN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL

2 x 14G TEK SCREWS ABOVE & BELOW IN SIDE OF PURLIN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL

4 x 14G TEK SCREWS PER COLUMN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL

Y

SLAB DETAIL

INDICATES 16 mmØ GRADE 4.6 BOLT

8 X 14G TEK SCREWS

2C25024 FRAME RAFTER

2C25024 FRAME COLUMN

DBL. 3mm 11" HAUNCH BRACKET (SAME DEPTH AS MEMBERS)

3920 mm TO TOP OF CONCRETE FOUNDATION

2C15015 KNEE BRACE, 2600 mm LONG (OMIT AT ENDWALLS)

(2) 16 mmØ GRADE 4.6 BOLTS AT EACH END OF KNEE BRACE

NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.

E

PURLIN CONNECTION

2C25024 FRAME RAFTER

DBL. 3mm 11" APEX BRACKET, WITH (8) 16 mmØ GRADE 4.6 BOLTS PER BRACKET

8 X 14G TEK SCREWS

2550 mm

(2) 16 mmØ GRADE 4.6 BOLTS AT EACH END OF APEX BRACE

2C15015 APEX BRACE (OMIT AT ENDWALLS), 5200 mm LONG

NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.

F

GIRT CONNECTION

50mm x 200mm x 200mm TALL MFA BRACKET WITH 8 X 14G TEK SCREWS INTO APEX BRACKET AND 12 X 14G TEK SCREWS INTO MULLION

C25024 (OPEN SIDE OF CEE MAY FACE EITHER DIRECTION, U.N.O.)

C25024 ENDWALL RAFTER

NOTE: SEE DETAIL M/9 FOR ENDWALL MULLION BASE CONNECTION

G

TOP HAT CONNECTION

RAFTER/EAVE PURLIN

12 x 14G TEK SCREWS

COLUMN

COLUMN ADJACENT TO ROLLER DOOR AFTER NOTCHED OUT

A

HAUNCH CONNECTION

B

APEX CONNECTION

C2

ENDWALL MULLION TO RAFTER
PEAK CONDITION

D

ENDWALL MULLION ROTATED

bestsheds

Value & Quality Direct to You

151 Smeaton Grange Road,
Smeaton Grange, NSW, 2567
Phone: 02 4648 7777
Fax: 02 4648 7700
Email: sales@bestsheds.com.au

EMERALD

DESIGN & CONSTRUCTION

CIVIL & STRUCTURAL ENGINEERS

COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORE

CAMILO PINEDA MORENO

Bend MIEAust RPEng RPEQ 15562 TBP PE003976 (VIC)

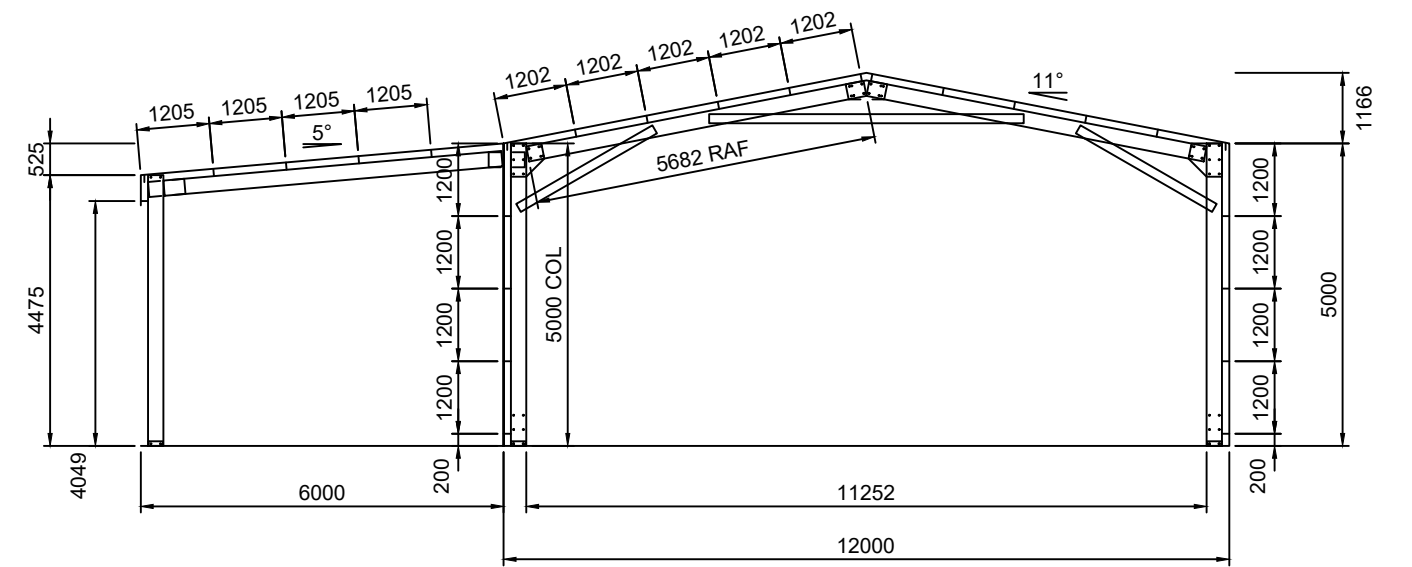
Sig

02.12.2024

Customer Name: Tara Clarke
Site Address: 919 Spring Ridge Rd
Beryl,
NSW, 2852

DATE 02-12-2024
JOB NO. 0598471145
SHEET 8 of 10

P TH120 SIDE ROLLER DOOR DETAIL	S END DOOR HEADER AND JAMB	T FLYBRACE	
L INTERNAL COLUMN BASE	M ENDWALL MULLION BASE	N ROTATED ENDWALL MULLION BASE	O ENDWALL GIRT BRACKET
R LEANTO HAUNCH CONNECTION	I ROOF SHEETING	J WALL SHEETING	K CORNER COLUMN BASE



1
10 TYP. FRAME CROSS-SECTION
SCALE: 1:125 FRAMES 2-4