### **GENERAL NOTES**

These documents show the general arrangement of the building and include some items not supplied (refer to the quotation for nomination of all items to be provided). All items not nominated therein shall be supplied and installed by others.

The plans provided here are the latest at the time of print. Earlier plans provided may have become outdated due to engineering changes and should not be used. The plans and drawings are extensive and give all the information needed for a competent person to erect the building. The building is not designed to stand up by itself when it is partially complete. Consequently, construction bracing is critical during erection.

The owner has been requested to check off the BOM after the building delivery. You should check that you are able to locate all materials nominated in the BOM. You should also confirm that the length and size (including thickness), nominated in the BOM is what has been provided. Any missing items are the responsibility of the client once correct delivery has been confirmed as per Terms and Conditions of Sale.

### **DESIGN CRITERIA**

These building plans have been prepared to comply with the standards nominated in the engineer's letter. All plans are not to Scale.

### ADDITIONAL DOCUMENTATION TO BE SUPPLIED BY PURCHASER/OWNER

The Purchaser/Owner is responsible for:

- \*Provision of Soils Report for the site and in the building area on which the building is to be erected
- \*Site Plan and Drainage Plans
- \*Any other plans not covered by these engineering plans requested by the local Council or the authority

### **RAINWATER AND DRAINAGE**

All Rainwater and drainage designs are the responsibility of the purchaser/owner. Residential gutters and downpipes where supplied are based on average rainfall for the state and may not be sufficient for your building size or usage. Please speak to your building designer or contractor to ensure gutters are fit for purpose.

### **BUILDING CONSTRUCTION REQUIREMENTS**

The Builder and Purchaser are to ensure that all construction is carried out in accordance with the Plans, the Construction Manual and the Bill of Materials (BOM).

It is the responsibility of the builder to ensure that they are familiar with the operational risks and their obligations in carrying out construction work.

The builder must ensure that they have an appropriate Health & Safety Plan (The Plan) compliant with and as required by their local, state and federal regulations. The Plan will need to take into account the site conditions, the size of the building and the experience of the construction personnel. The Plan will, most likely, differ for each project.

The builder must ensure that The Plan is adhered to. Particular attention should be paid to the requirements to ensure that any person working at heights are properly trained and following the requirements as set out by The Plan

It is recommended that you check with the appropriate authority in your area as to your responsibilities.

### **TEMPORARY SUPPORT, LIFTING AND SHORING**

The design of temporary propping shoring, lifting and support during construction has not been undertaken and is not included in our engagement. This work is the responsibility of the Contractor undertaking the construction of the building.

### **SLAB DETAILS - GENERAL**

- \* The minimum size of Piers under the columns and End Wall Mullions are nominated on the Material Specifications Plan. When the slab and piers are poured as one pour, the depth of the pier is to the top of the slab.
- \* Pier Reinforcement: for any piers over 1100mm, deformed bar to within 100mm of base and minimum 75mm top cover. Minimum side cover 75mm, maximum 100mm. Rod to be caged horizontally at least twice and at a maximum of 300mm spacing. Tie with a minimum of 6mm diameter cage tie. Where pier diameter is less than 450mm diameter, use 4 N12. For diameters equal to and over 450mm, use 4 N16.

### **Concrete Slab**

- \* Footings and slabs, including internal and edge beams, must be founded on natural soil with a minimum allowable bearing capacity of 100kPa. Design covers soil classifications of A, S, M, H1 or H2 for a class 10 building.
- \* The footing designs have been calculated with adhesion values of 0kPa, 25kPa and 50kPa for clay soils and dense sand soils only.
- \* A site specific geotechnical investigation has not been performed. The builder will need to verify the soil type and conditions.
- \* Site conditions different to those specified require a modified design.
- \* Sub grade shall be excavated and compacted to a minimum of 100% standard dry density ratio and within 2% of the OMC to comply with AS2159.
- \* Designs are in accordance with AS 3600:2018
- \* All concrete to be in accordance with AS 3600:2018. Minimum 25 Mpa, with 80mm slump.
- \* Concrete should be cured for 7 days before commencing construction of the building.
- \* Refer to connection details.
- \* Saw construction joints to be 25mm deep x 5mm wide. Saw cuttings shall take place no later than 24 hours after pouring. Saw construction joints to be placed at a maximum spacing of 6.3m (in both the length and the span). Care should be taken to avoid construction cuts intersecting where any fixing to the slab is to be made.
- \* Where columns or end wall mullions have been removed, piers are not required.
- \* End wall mullion spacing may move due to location of openings or doors. Check layout and component position plan, and relocate piers as required.

\* The Slab Plan indicates those parts of the slab which are 50mm below main slab/piers.

### For Class A, S or M Sites

- \* Slab thickness to be a minimum of 100mm with SL 72 mesh and 40mm top cover.
- \* Concrete piers under Roller Doors Jambs to be a minimum size as below: C15015 300mm dia x 375mm deep, centered to the C Section Where heavy traffic is to go through the roller doors, it is recommended that the slab edge should be thickened to 200mm deep by 300mm wide for the length between the mullions. Place an additional section of SL 72 mesh, 50mm from the base in all thickenings.

### For Class H1 or H2 Sites

- \* Slab thickness to be a minimum of 100mm with SL 82 mesh and 40mm top cover.
- \* Perimeter beams 400mm deep x 300mm wide with Y12 3 bar Trench Mesh to the perimeter of the building.
- \* Internal beams 400mm deep by 300mm wide with Y12 3 bar Trench Mesh at a max spacing of 6.2m.
- \* Concrete piers under Roller Doors Jambs to be a minimum size as below: C15015 300mm dia x 500mm deep, centered to the C Section

### **SHEETED PORTALS AND MULLIONS**

All end wall mullions provide critical support to portal frames and cannot be repositioned or removed under any circumstances without engineering approval.

### **BRACING NOTES**

- \* Refer to Connection Details.
- \* All Cross Bracing is achieved with 1.2mm Strap G450.
- \* Cross bracing is to be fixed taut and secured with 14.20 x 22 frame screws at each end, quantity as per connection details.
- \* Fly bracing to be fixed to the purlins/girts on all mid portal rafters, columns and end wall mullions. Fly bracing is to be fitted to every second purlin/girt, or, on every one, where the spacing between fly braces would exceed the maximum specified below for the relevant column/rafter size:
  - C150 maximum 1800mm spacing
  - C200, C250 maximum 2200mm spacing
  - C300 maximum 2800mm spacing
  - C350 maximum 2800mm spacing
  - C400 maximum 2800mm spacing

Initial measurement is from the haunch of the column/rafter, and from the rafter for any end wall mullions.

- \* Open bays to have fly bracing fitted to every available girt supporting the header sheets.
- \* Where windows/GSD are placed in any bay where cross bracing is shown, then
- a) this can be replaced by moving the bracing to another bay OR

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Site Address: 844 Castlereagh Hwy Menah NSW 2850 Australia

Drawing # TMUD223004 - 2
Print Date: 5/08/2022

General Notes

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nature:

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b) due to the bracing provided by the window jambs, where space permits, bracing should be placed under and over the window.

\* All bracing strap ends to be located as close as practical to structural member's (columns, rafters, mullions) centerline.

### **BOLTS**

- \* Unless otherwise nominated, all bolts are grade 4.6
- \* All tensioned bolts shall be tensioned using the part turn method (refer to AS4100). For the erector, full details are in the construction manual.

### **ROLLER DOORS**

All comments regarding roller doors are based from inside the building looking out

### **OTHER MATERIALS NOTES**

- \* All Sheeting, Flashing and framing screws are Climaseal 4.
- \* All purlin material has Z350 zinc coating with minimum strength of 450MPa.

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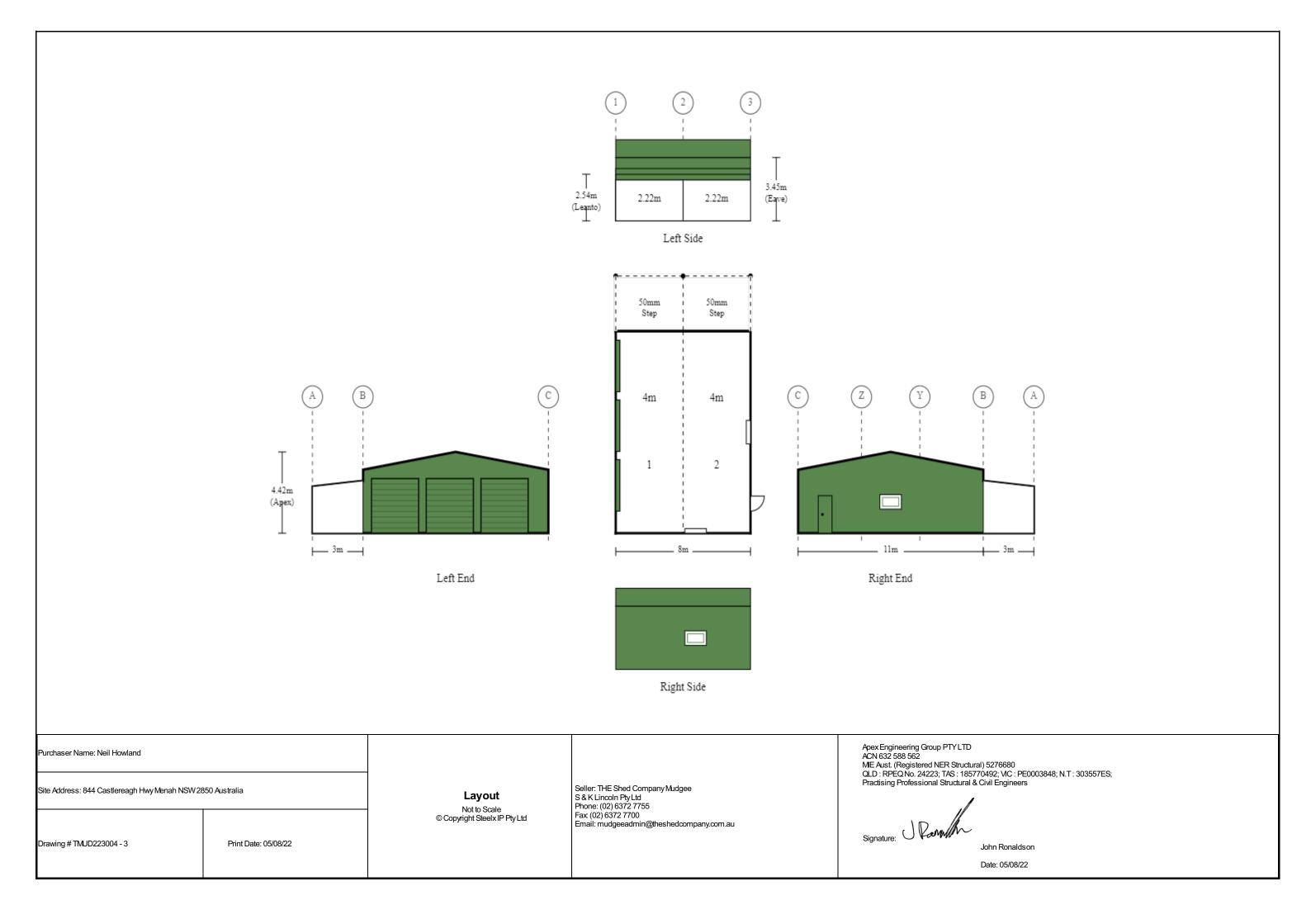
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### MATERIAL SPECIFICATIONS

### For further information regarding the tabulated values shown, refer to the General Notes

### **Building Dimensions**

Categories	Span	Length	Pitch	Height	Grid(s)	Portal(s)
Main Building	11	8	10	3.45	B - C	1 - 3
Left Leanto	3	8	6	2.535	A - B	1 - 3

### **Portal Frame Elements**

Grid / Portal Number		1	2	3
Columns	А	2C15012	2C15012	2C15012
	В	C20015	C20019	C20015
	С	C20015	C20019	C20015
Rafters	A - B	C15012	C15012	C15012
	B - Apex	C15015	C20019	C15015
	Apex - C	C15015	C20019	C15015
End Wall Mullions	Y	-	-	C15015
	Z	-	-	C15015
Apex Braces	Apex	-	C15019 @ 3.3m	-

### **Bay Section Elements**

	ion Elements			
Grid / Bay Number		1	2	Maximum
Bay Widths		4	4	
Roof Purlins (refer to Purlin And Girt Plan)		Z100	Z100	
Roof Purlin Spacing (End)	A - B	0.9	0.9	0.900
	B - Apex	0.9	0.9	0.900
	Apex - C	0.9	0.9	0.900
Roof Purlin Spacing (Internal Spans)	A - B	0.945	0.945	1.200
	B - Apex	0.902	0.902	1.200
	Apex - C	0.902	0.902	1.200
Eave Purlin	А	2XC15012	2XC15012	
	В	XC15012	XC15012	
	С	XC15012	XC15012	
Side Girts (refer to Purlin And Girt Plan)		Z100	Z100	
Side Girt Bridging (Rows)	В	YES (1)	YES (1)	
	С	YES (1)	YES (1)	
Side Girts Spacing (End)	А	1.7	1.7	1.700
	В	1.61	1.61	1.700
	С	1.61	1.61	1.700
Side Girts Spacing (Internal)	Α	1.7	1.7	1.700
	В	1.61	1.61	1.700
	С	1.61	1.61	1.700

### **End Bay Section Elements**

Grid / Portal Number		1	3	Maximum
End Girts (refer to Purlin And Girt Plan)		Z100	Z100	
End Girts Spacing (End)	A - B	-	-	1.700
	B-C	1.61	-	1.700
	B - Y	-	1.61	1.700
	Y - Z	-	1.61	1.700
	Z - C	-	1.61	1.700
End Girts Spacing (Internal)	A - B	-	-	1.700
	B-C	1.61	-	1.700
	B - Y	-	1.61	1.700
	Y - Z	-	1.61	1.700
	Z - C	-	1.61	1.700

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Specification Sheet

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to: 05/09/22

### MATERIAL SPECIFICATIONS

For further information regarding the tabulated values shown, refer to the General Notes

**End Bay Section Elements (Continue)** 

	( • .	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	1	3	Maximum
B-C	HEADER2	-	
B - Y	-	-	
Y-Z	-	-	
Z-C	-	-	
B-C	C15015	-	
B - Y	-	-	
Y - Z	-	-	
Z-C	-	-	
B-C	-	-	
B - Y	-	-	
Y - Z	-	-	
Z-C	-	C10010	
B-C	-	-	
B - Y	-	-	
Y - Z	-	-	
Z-C	-	C10012	
	B-C B-Y Y-Z Z-C B-C B-Y Y-Z Z-C B-C B-Y Y-Z Z-C B-C B-Y	1	B-C HEADER2 - B-Y Y-Z B-C C15015 - B-Y Y-Z B-C B-C B-C C15010 - C15015

**Cladding Elements** 

Category	Colour	Product
Roof Sheeting	Surfmist	CORODEK® 0.42 BMT (0.47TCT)
Roof Flashings COLORBOND® ste		BlueScope 0.55 BMT
Wall Sheeting ShaleGrey		TRIMCLAD® 0.42 BMT (0.47TCT)
Wall Flashing COLORBOND® steel		BlueScope 0.55 BMT

### Pier Sizes

			Dep	th (m)	- with	Slab
Adhesion (kPa)	Soil Description	Diameter (m)	BP1	BP2	BP3	BP4
0	Sandy Soil	0.3	-	0.45	-	0.45
		0.45	0.45	0.45	0.45	0.45
		0.6	0.45	0.45	0.45	0.45
25	Soft to Firm Clay	0.3	-	0.45	-	0.45
		0.45	0.45	0.45	0.45	0.45
		0.6	0.45	0.45	0.45	0.45
50	Stiff to Very Stiff Clay	0.3	-	0.45	-	0.45
		0.45	0.45	0.45	0.45	0.45
		0.6	0.45	0.45	0.45	0.45

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Specification Sheet

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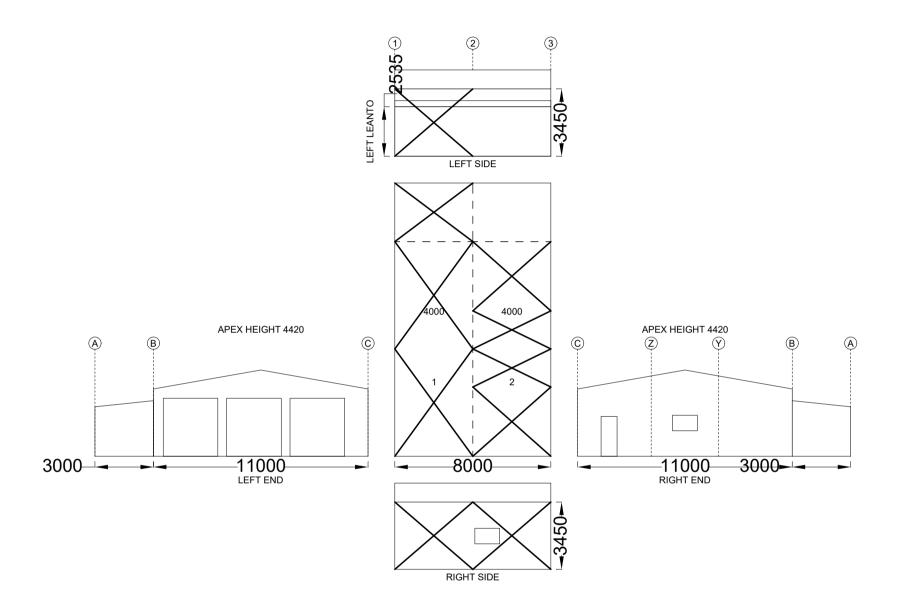
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Cross Bracing is achieved with 1.2mm Strap. Refer to Connection Details.

Cross bracing in the roof is to the purlin nearest to the end wall mullions, where applicable.



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### Bracing

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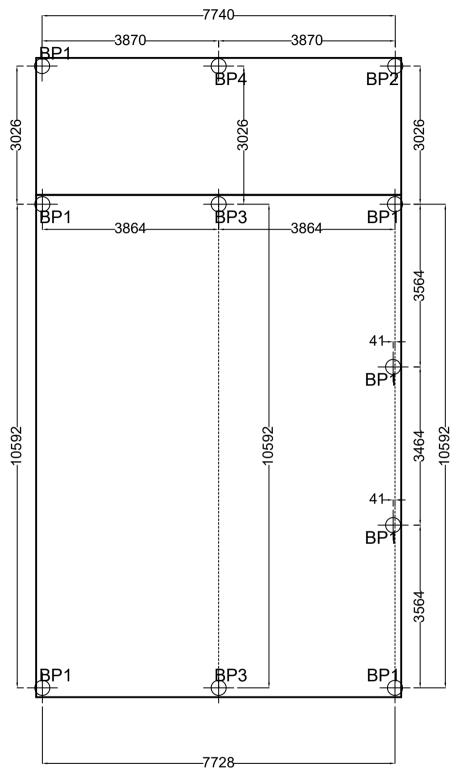
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These dimensions are provided as a guide only. It is the responsibility of the concreter to confirm that all dimensions are correct. Refer to Material Specifications Plan for BP dimensions.

Refer to Slab Plan for concrete stepdowns.



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Concrete Piers PIER MEASUREMENT ONLY NOT TO SCALE

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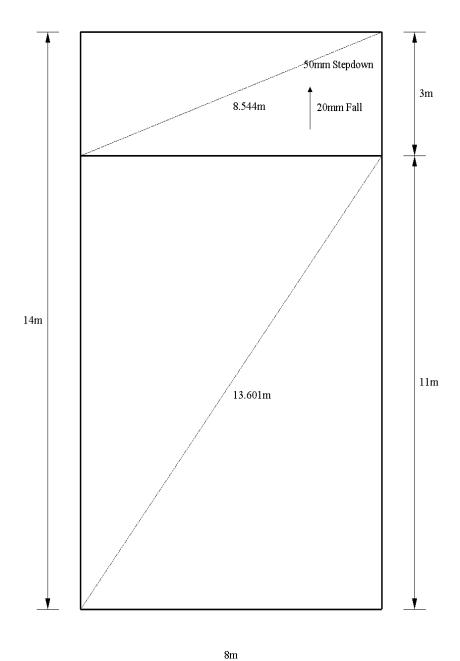
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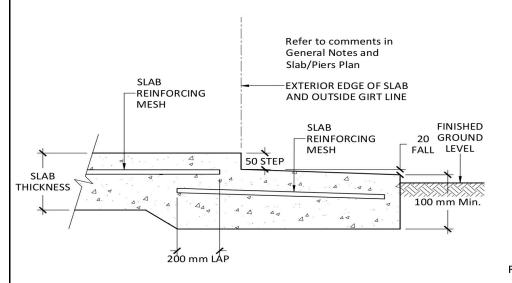
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Slab Dimensions
Also refer to Concrete Piers Plan
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Date: 05/08/22



**CONCRETE SLAB with** 

50 mm STEP DOWN

# SLAB REINFORCING MESH 40mm min COVER SLAB THICKNESS THICKNESS COMPACTED FILL PVC MEMBRANE UNDER SLAB REINFORCEMENT (\*)

# (\*) REFER TO GENERAL NOTES FOR SPECIFICATION INTERNAL BEAM (H1 & H2 SOIL TYPE, OPTIONAL A, S & M)

SLAB REINFORCING MESH
40mm min COVER

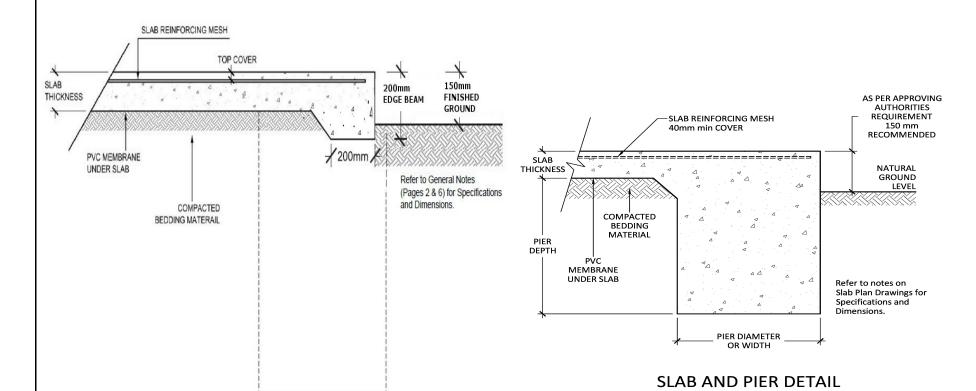
SLAB
THICKNESS
RECOMMENDED

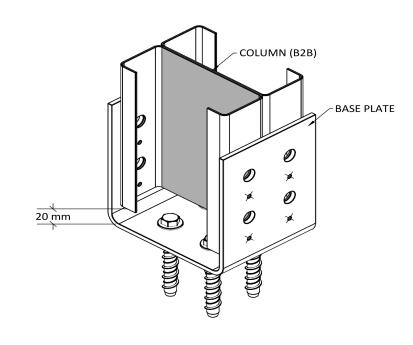
COMPACTED
FILL

PVC MEMBRANE
UNDER SLAB
UNDER SLAB

(\*) REFER TO GENERAL NOTES FOR SPECIFICATION

## PERIMETER BEAM (H1 & H2 SOIL TYPE, OPTIONAL A, S & M)





FIXING BOLTS - 4 of M12 x 100 SCREWBOLT

FIXING BOLTS - 8 of M12 x 30 Galv.

FIXING SCREWS - 8 of 12.24 x 38 Series 500

2C150 COLUMN FIXING (BF)

Purchaser Name: Neil Howland

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Drawing # TMUD223004 - 8

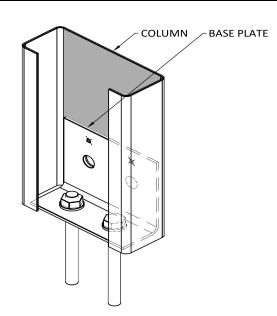
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**Connection Details** 

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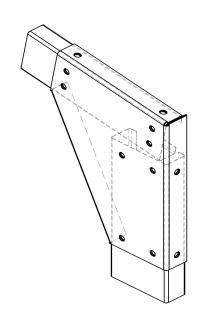


FIXING BOLTS - 2 of M12 x 80 TRUEBOLT

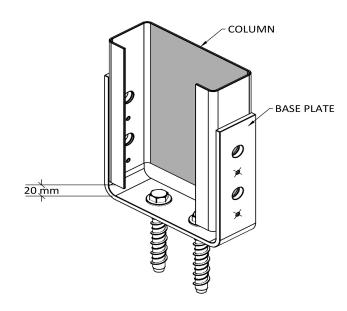
FIXING BOLTS - 2 of M12 x 30 Galv.

FIXING SCREWS - 2 of 14.20 x 22

### C150 MULLION BASE PLATE (B)



 $\odot$  FIXING BOLTS - 12 of M12 x 30 (8.8) KNEE HAUNCH BRACKET (HS&HT) - C200-C150, 10°

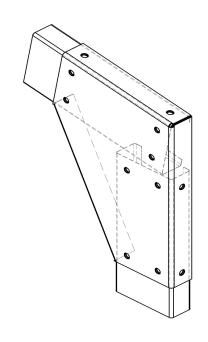


FIXING BOLTS - 2 of M12 x 100 SCREWBOLT

FIXING BOLTS - 4 of M12 x 30 Galv.

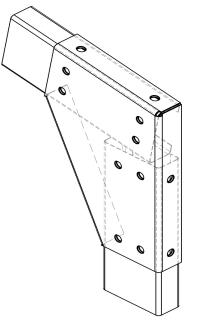
FIXING SCREWS - 4 of 12.24 x 38 Series 500

### C200 COLUMN FIXING (BF)



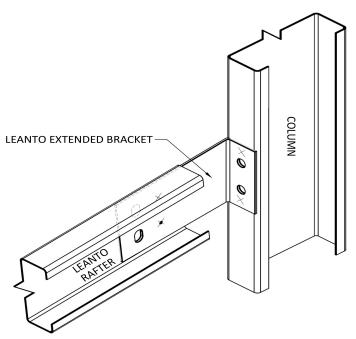
○ FIXING BOLTS - 12 of M12 x 30 (8.8)

KNEE HAUNCH BRACKET (HS&HT) - C200, 10°



O FIXING BOLTS - 12 of M12 x 30 (8.8)

### KNEE HAUNCH BRACKET (HS&HT) - C150, 6°



O FIXING BOLTS - 4 of M12 x 30 X FIXING SCREWS - 4 of 14.20 x 22

### LEANTO EXTENDED CONNECTION DETAIL

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Drawing # TMUD223004 - 8

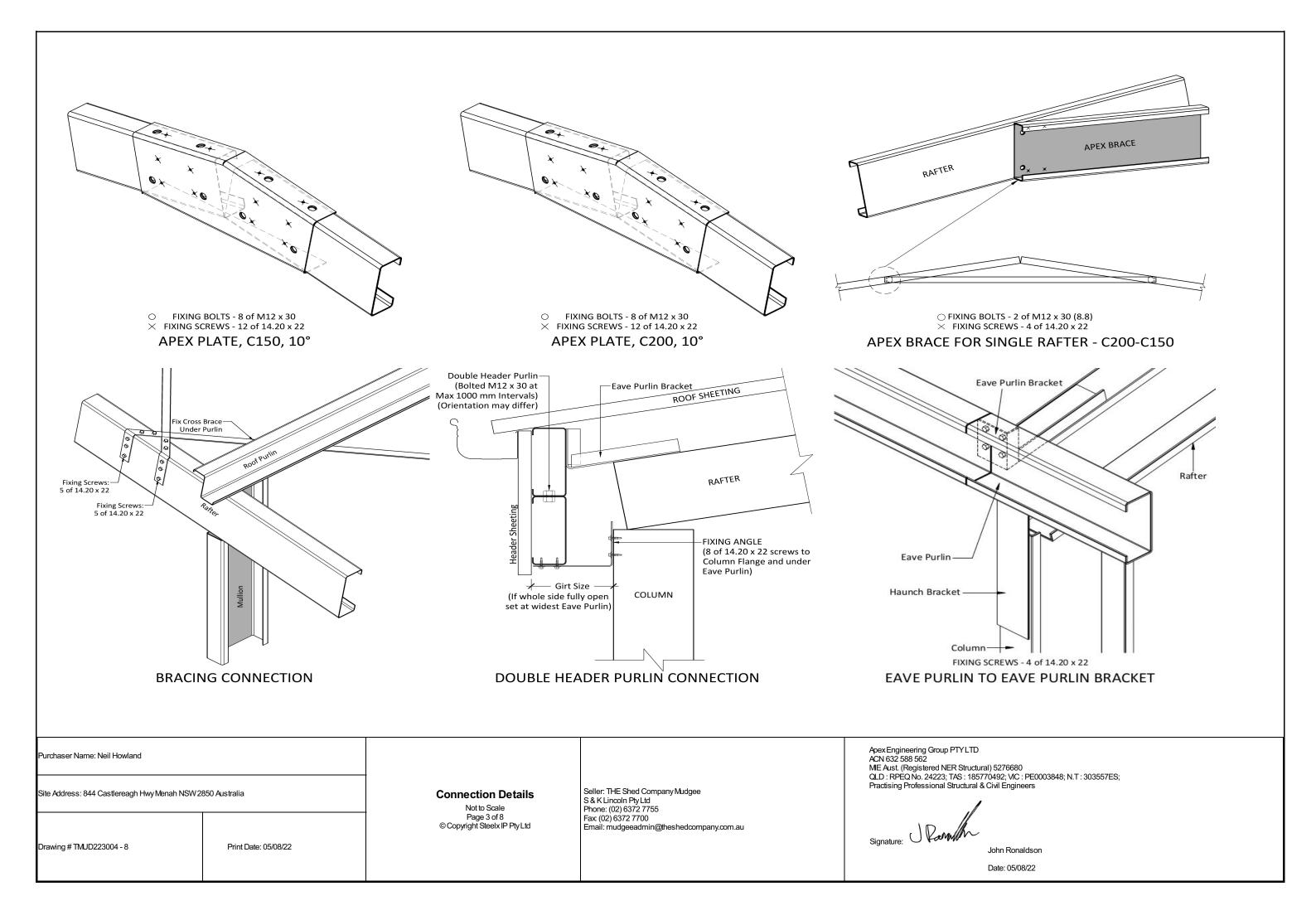
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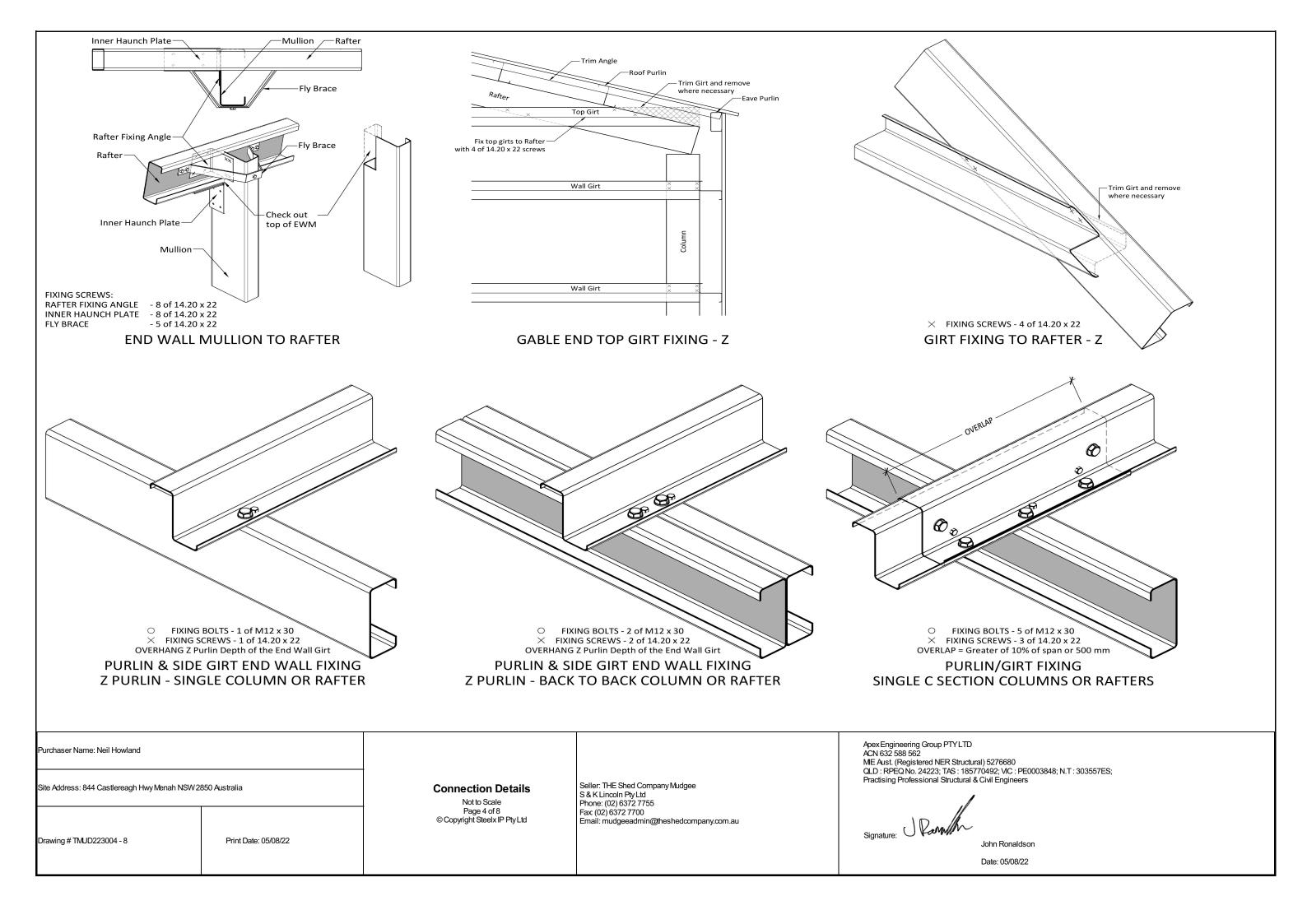
### **Connection Details**

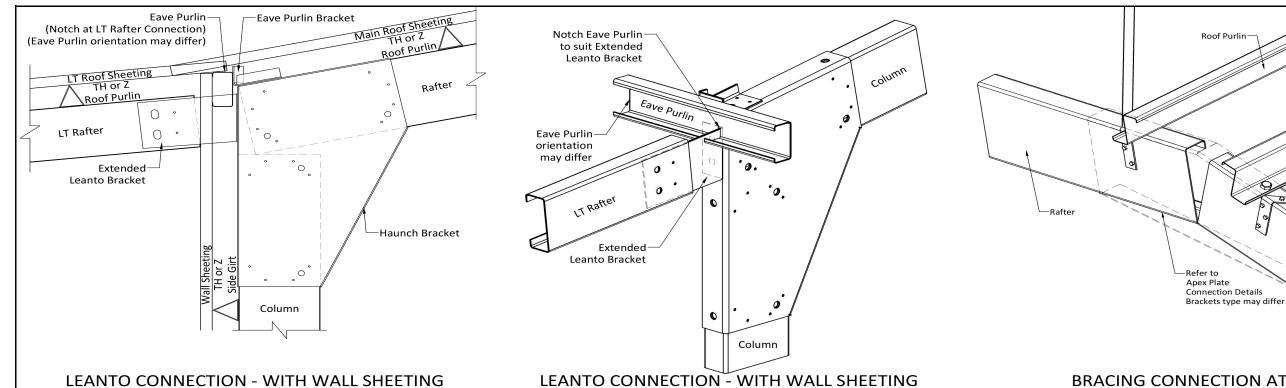
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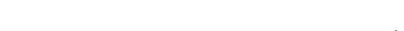


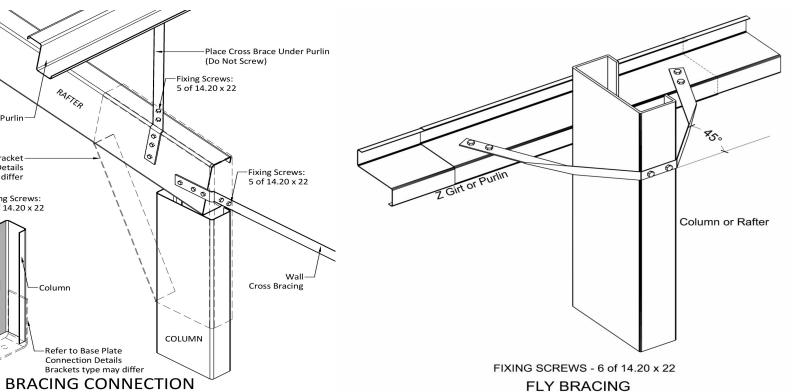
LEANTO CONNECTION - WITH WALL SHEETING

Roof Purlin-

Fixing Screws: 5 of 14.20 x 22

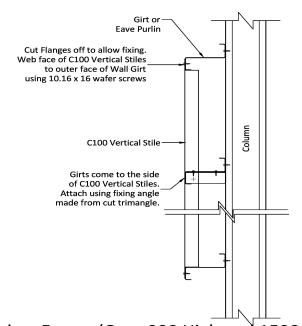
Refer to Haunch Bracket-Connection Details Brackets type may differ





**BRACING CONNECTION AT APEX** 

-Fixing Screws 5 of 14.20 x 22



Window Frame (Over 900 High and 1500 Wide) Note: Top of Window 2100 above GL. Window frame fixed to vertical stiles only

Purchaser Name: Neil Howland Site Address: 844 Castlereagh Hwy Menah NSW 2850 Australia Drawing # TMUD223004 - 8 Print Date: 05/08/22

-Refer to Base Plate Connection Details

Brackets type may differ

**Connection Details** 

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