

27 February, 2025

To whom it may concern

This certification has been completed based on an Importance Level of 2.
Any approving authority should confirm that the Importance Level nominated is appropriate for the building's usage nominated in the application form used to apply for a Building Permit / Construction Certificate.

I certify that I am an independent technical expert and have reviewed Steelx's "Shed Management System" software that has produced the design and drawings detailed below.; I have reviewed the documents based on the site specific analysis that has been carried out using the "Shed Safe SiteCheck" software (Refer to the Site Specific Design Criteria Analysis included with these documents).

Job Number:	WSS250306	Building Class:	10a
Customer:	Mick Collins	Max Design Wind Speed	of 41m/s
Address:	66 High St Warialda NSW 2402 Australia (-29.53577 and 150.57145)		

Drawing Number	Date	Number of Pages	Description
WSS250306 - 2	27/02/2025	1	General Notes
WSS250306 - 3	27/02/2025	1	Layout
WSS250306 - 4	27/02/2025	1	Material Specification Sheet
WSS250306 - 5	27/02/2025	1	Bracing
WSS250306 - 6	27/02/2025	1	Concrete Piers
WSS250306 - 7	27/02/2025	1	Slab Dimensions
WSS250306 - 8	27/02/2025	3	Connection Details
WSS250306 - 9	27/02/2025	1	Flashing Fixing Details

(Some drawings have multiple pages, eg: "1 of 3")

As an independent technical expert, I verify this design complies with the following codes and standards:

NCC: 2022	AS/NZS 1170.1:2002
AS/NZS 1170.2:2021	AS/NZS 1170.3:2003
AS/NZS 1170.4:2007	AS 2870:2011
AS 3600:2018	AS 4100:2020
AS/NZS 4600:2018	

Unless nominated, the building has not been designed for any additional loads including, but not limited to, earthquake, snow, solar panels or lining with any materials.

Signed



John Ronaldson
for and on behalf of
Apex Engineering Group PTY LTD
ACN 632 588 562

Member Institution of Engineers (Aust.), CPEng (NER Structural) Regn. No. 5276680
Registered Professional Engineer (Structural) - Queensland: Regn. No. 24223
Registered Building Designer & Professional Engineer (Structural) - Tasmania: Regn. No. 185770492
Registered Professional Engineer (Structural) - Victoria: Regn. No. PE0003848

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.

The structure has been designed to allow for less than 50% of the cross-section exposed to the wind under the roof to be blocked by goods or materials in accordance with AS/NZS 1170.2:2021. Blocking more than 50 % of the cross - section under the roof with goods or materials will change the loads on the structure which have not been allowed for.

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

Piers

- * 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 pressure of 100kPa. Design covers soil classification A, S or M for a class 10a 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.

BRACING NOTES

- * Refer to Connection Details.
- * All Cross Bracing is achieved with 1.2 mm Strap G450.
- * Cross bracing is to be fixed in situ 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
- * 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.

OTHER MATERIALS NOTES

- * All Sheeting, Flashing and framing screws are Climaseal 3.
- * All purlin material has Z350 zinc coating with minimum strength of 450MPa.

Revision	Date	Initial

Purchaser Name: Mick Collins

Site Address: 66 High St Warialda NSW 2402 Australia

Drawing # WSS250306 - 2

Print Date: 27/02/2025

General Notes NOT FOR CONSTRUCTION

Page 1 of 1

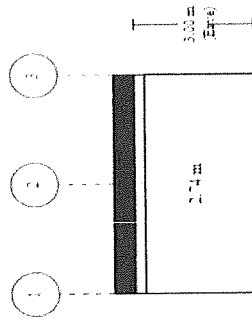
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Seller: Wide Span Sheds Pty Ltd
Name: Wide Span Sheds Pty Ltd
Phone: 07 5657 8888
Fax: 07 5657 8899
Email: admin@sheds.com.au

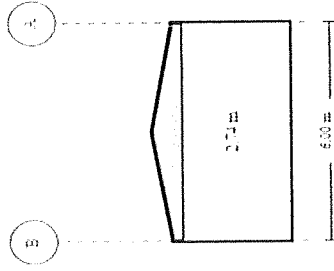
Signature:

John Ronaldson
Date: 27/02/25

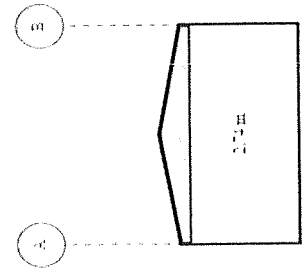
APSA Engineering Group PTY LTD
ACN 632 585 582
VIC Aust. (Registered Structural) 5276880
QLD RPEQ No. 24223 TAS : 185770492, VC : PE0003846, N.T. 303557ES.
Incorporating Professional Structural & Civil Engineers



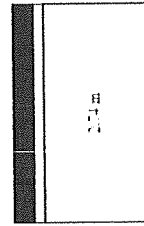
Left Side



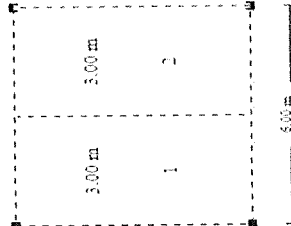
Right End



Left End



Right Side



Purchaser Name: Mick Collins

Site Address: 66 High St Warrilwaa NSW 2402 Australia

Drawing # WSS250306 - 3

Print Date: 27/02/25

Layout
NOT FOR CONSTRUCTION
Not to Scale
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ME Asst (Registered NER Structural) 5276880
QLD: RPEQ No. 24223 TKS: 16570492 VIC: PEO003948 NT: 308557ES
Practising Professional Structural & Civil Engineers

Signature: *J. Randall* Date: John Randallson
Date: 27/02/25

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	6	6	10°	3	A - B	1 - 3

Portal Frame Elements

Grid / Portal Number	1	2	3
Columns	A	SHS10030	SHS10030
	B	SHS10030	SHS10030
Beams	A - Apex	MC15015	MC15015
	Apex - B	MC15015	MC15015

Bay Section Elements

Bay Number	1	2
Bay Widths	3	3
Roof Purlins (refer to Purlin And Girt Plan)	Z100	Z100
Roof Purlin Spacing (End)	A - Apex	0.956
	Apex - B	0.956
Roof Purlin Spacing (Internal Spans)	A - Apex	0.956
	Apex - B	0.956
Beam Overs	A	MC25019
	B	MC25019
Side Girts Spacing (End)	A	0.16
	B	0.16
Side Girts Spacing (Internal)	A	0.16
	B	0.16

End Bay Section Elements

Grid / Portal Number	1	3
End Girts (refer to Purlin And Girt Plan)	C-3	C-3
End Girts Spacing (End)	A - B	0.16
End Girts Spacing (Internal)	A - B	0.16

Cladding Elements

Category	Colour	Product
Roof Sheet	CottagesGreen	TRIMCLAD® 0.42 BMT
Wall Sheet	Surmist	TRIMCLAD® 0.42 BMT

Pier Sizes

Adhesion	Soil Description	Diameter	Depth - with Slab
0.00e+00 kPa	Sandy Soil	0.3	0.45
		0.45	0.45
		0.6	0.45
25.00 kPa	Soft to Firm Clay	0.3	0.45
		0.45	0.45
		0.6	0.45
50.00 kPa	Stiff to Very Stiff Clay	0.3	0.45
		0.45	0.45
		0.6	0.45

Revision	Date	Initial

Purchaser Name: Mick Collins

Site Address: 66 High St Warralua NSW 2402 Australia

Drawing # WSS250306 - 4

Print Date: 27/02/2025

Material Specification Sheet
NOT FOR CONSTRUCTION

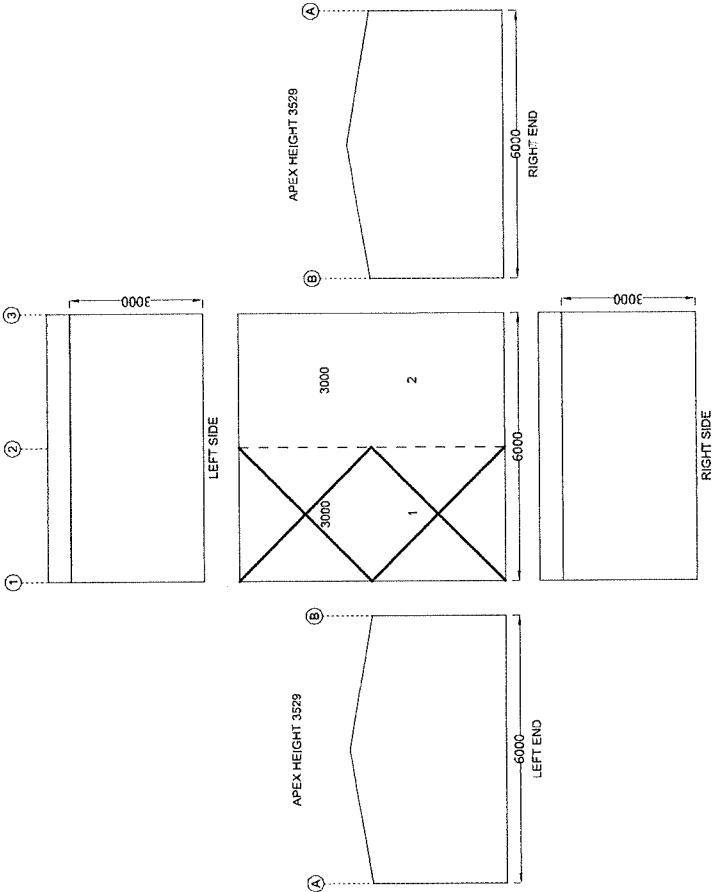
Page 1 of 1
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Seller: Wide Span Sheds Pty Ltd
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Phone: 07 5557 8888
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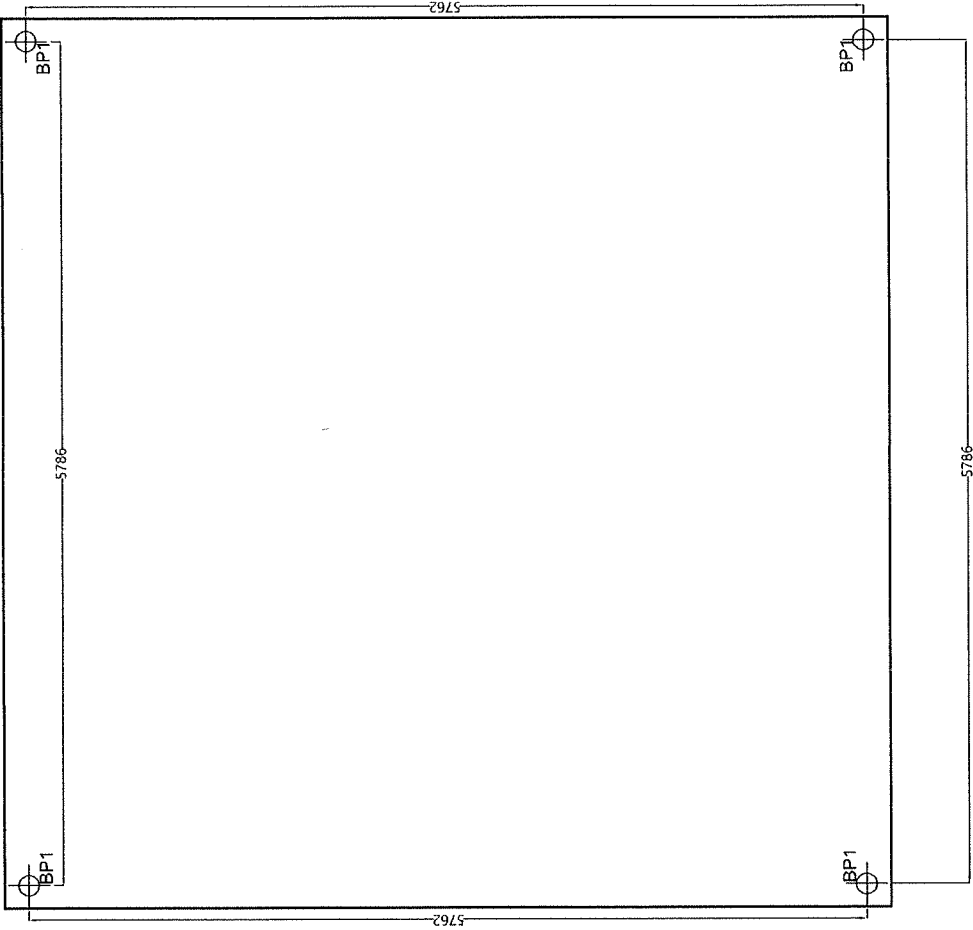
Signature: John Ronaldson
Date: 27/02/25

Cross Bracing is achieved with 12 mm Strap. Refer to Connection Details.



Revision	Date	Initial	Purchaser Name: Mick Collins	Bracing NOT FOR CONSTRUCTION NOT TO SCALE Page 1 of 1 ©Copyright Steels IP Pty Ltd	Seller: Wide Span Sheds Pty Ltd Name: Wide Span Sheds Pty Ltd Phone: 07 5657 8888 Fax: 07 5657 8899 Email: admin@sheds.com.au	ASAP Engineering Group PTY LTD ACN 632 588 582 1/16 Ave. (Registered NER Structural) 5276880 OLD RPEQ No. 24223 TAS: 185770492, VIC: PE0003848, N.T.: 303557ES. Practising Professional Structural & Civil Engineers	
							Site Address: 66 High St Warralida NSW 2402 Australia
							Drawing # WSS250306 - 5
			Print Date: 27/02/2025	Signature:  John Ronaldson			Date: 27/02/25

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 Specification Sheet(s) for the Pier Sizes.



Revision	Date	Initial	Purchaser Name: Mick Collins	Concrete Piers		PIER MEASUREMENT ONLY, NOT FOR CONSTRUCTION		Seller: Wide Span Sheds Pty Ltd		Apex Engineering Group Pty Ltd	
			Site Address: 66 High St Warialda NSW 2402 Australia	NOT TO SCALE		Name: Wide Span Sheds Pty Ltd		ACN 632 588 582		VIC Aust. (Registered NER Structural) 5276880	
			Drawing # WSS250306 - 6	Page 1 of 1		Phone 07 5557 8888		QLD RPEQ No. 24223 TAS : 185770492 VIC : PE0003948 N.T. : 303557ES		Bridgland Professional Structural & Civil Engineers	
				Print Date: 27/02/2025		Fax 07 5557 8899		Email: admin@sheds.com.au		Signature: 	
										Date: 27/02/25	