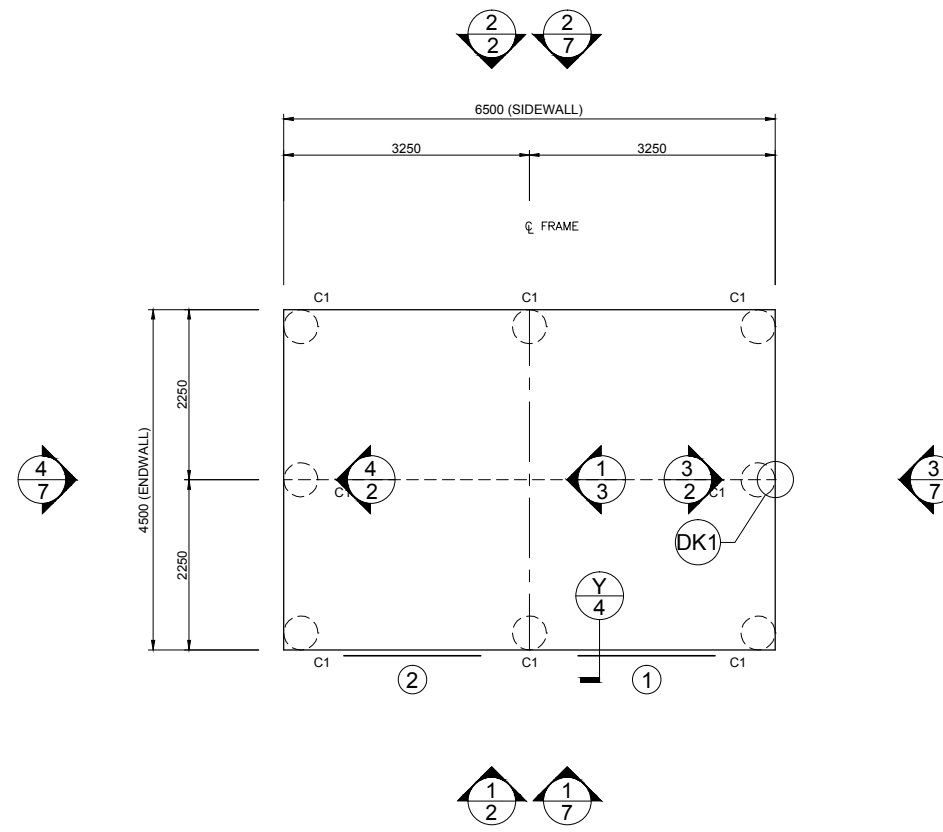


The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.

IF IN DOUBT, ASK.



1 FOUNDATION PLAN AND MEMBER LAYOUT  
SCALE: 1 = 100

MEMBER LEGEND

C1	C15012
----	--------

**S.Y.HARB ENGINEERING**  
 Dr. Simon Harb  
 Civil & Structural Engineer  
 B.E., MIE Aust CP Eng., Phd, NPER  
 Accredited Certifier

**Registered Professional Engineer 72682**  
**Dr. Simon Harb**  
 MIEAust, Phd, CPEng (Civil & Structural)  
 NPER  
 Signature: *[Signature]* Date: 6/1/23  
 Registered on the NPER in the Category of  
 Civil & Structural  
 National Professional Engineers Register Section Three

8 OF 1 SHEET	JOB NO. MASL56600	DATE 6/1/2023	CHECKED TM/SH	DRAWN FDS	STEEL BUILDING BY
	NCC 2019				

(CONTACT)  
**THE SHED KING...**  
 1300130102  
**LUKE MITCHELL**  
 21 ALTAIR AVENUE WEST  
 HOPE VALLEY



**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

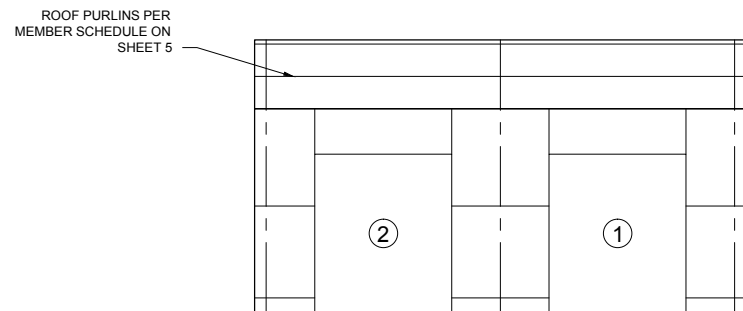
Registered Chartered Professional Engineer  
 Registered Professional Engineer (Civil & Structural) QLD  
 Registered Certifying Engineer (Structural) N.T.  
 Registered Engineer - (Civil) VIC  
 Registered Engineer - (Civil) TAS

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

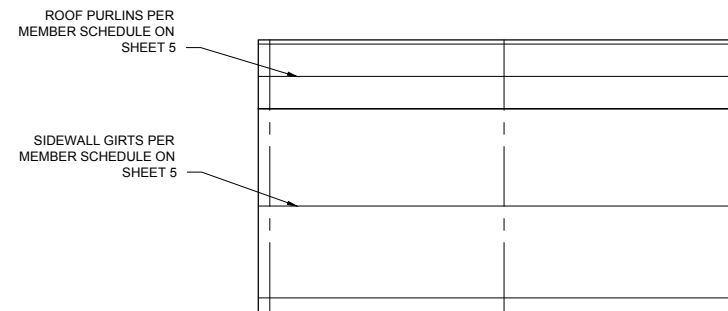
Mr Timothy Roy Messer BE MIEAust RPEQ  
 Signature: *[Signature]*  
 Date: 6/1/2023  
 Registered on the NPER in the areas of practice  
 of Civil & Structural National Professional  
 Engineers Register

DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY. ALL DIMENSIONS TO BE VERIFIED ON SITE.

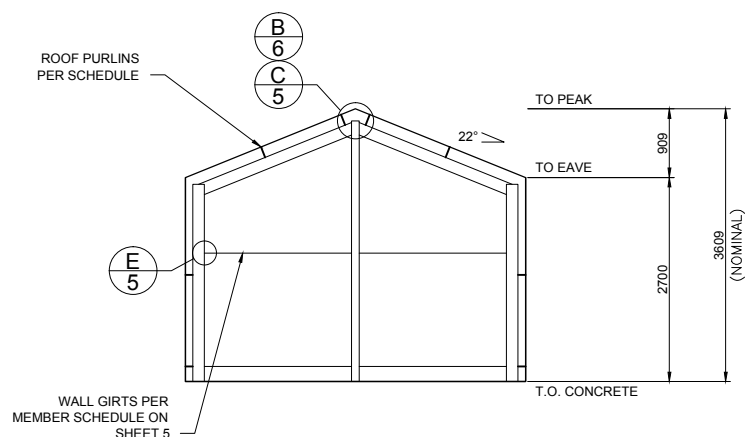
The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



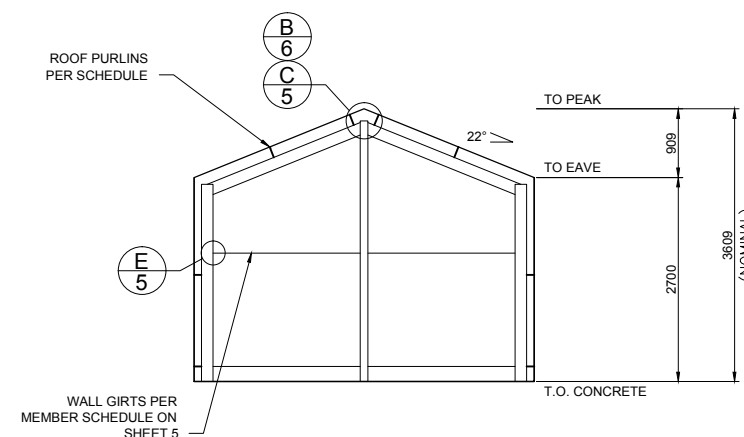
1 SIDEWALL EXTERIOR ELEVATION  
2 SCALE: 1 = 100



2 SIDEWALL EXTERIOR ELEVATION  
2 SCALE: 1 = 100



4 ENDWALL INTERIOR ELEVATION  
2 SCALE: 1 = 100



3 ENDWALL INTERIOR ELEVATION  
2 SCALE: 1 = 100

DIAGONAL X BRACING NOT REQUIRED IN THIS BUILDING.  
CLADDING DIAPHRAGM SUFFICIENT.

**S.Y.HARB ENGINEERING**  
Dr. Simon Harb  
Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NPER  
Accredited Certifier

**Registered Professional Engineer 726821**  
**Dr. Simon Harb**  
MIEAust, Phd, CPEng (Civil & Structural)  
NPER  
Signature..... Date 6/1/23...  
Registered on the NPER in the Category of  
Civil & Structural  
National Professional Engineers Register Section Three

2 OF 8 SHEET  
JOB NO. MASL56600  
DATE 6/1/2023  
CHECKED TMSH  
DRAWN FDS  
STEEL BUILDING BY

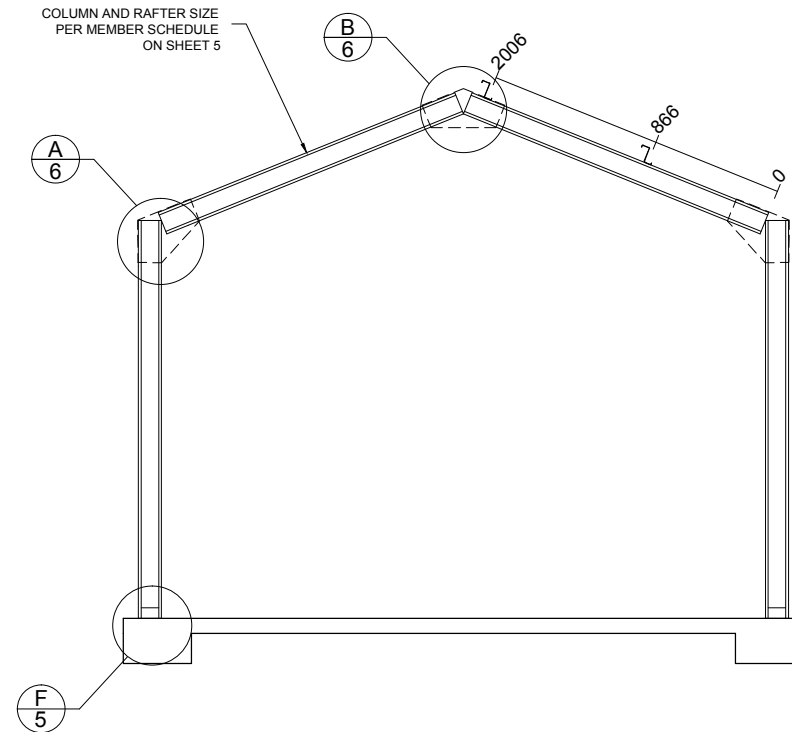
(CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY



**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.....  
Date ..... 6/1/2023 .....  
Registered on the NPER in the areas of practice  
of Civil & Structural National Professional  
Engineers Register

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



1 INTERNAL FRAME SECTION  
3 SCALE: 1 = 50

**S.Y.HARB ENGINEERING**

Dr. Simon Harb

Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NP  
Accredited Certifier

**Registered Professional Engineer 726821**  
**Dr. Simon Harb**

MIEAust, Phd, CPEng (Civil & Structural)



*(Signature)*

Signature.....Date 6/1/23

Refer to Sheet #4 for concrete specification.

Registered on the NPER in the Category of  
National Professional Engineers Register Section Three

3 OF 8	SHEET	JOB NO. MASL56600	DATE 6/1/2023	CHECKED TM/SH	DRAWN FDS
		NCC 2019			

STEEL BUILDING BY  
FOR  
AT

(CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY



**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)*

Signature.....Date 6/1/2023

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

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.

**STRUCTURAL GENERAL NOTES**

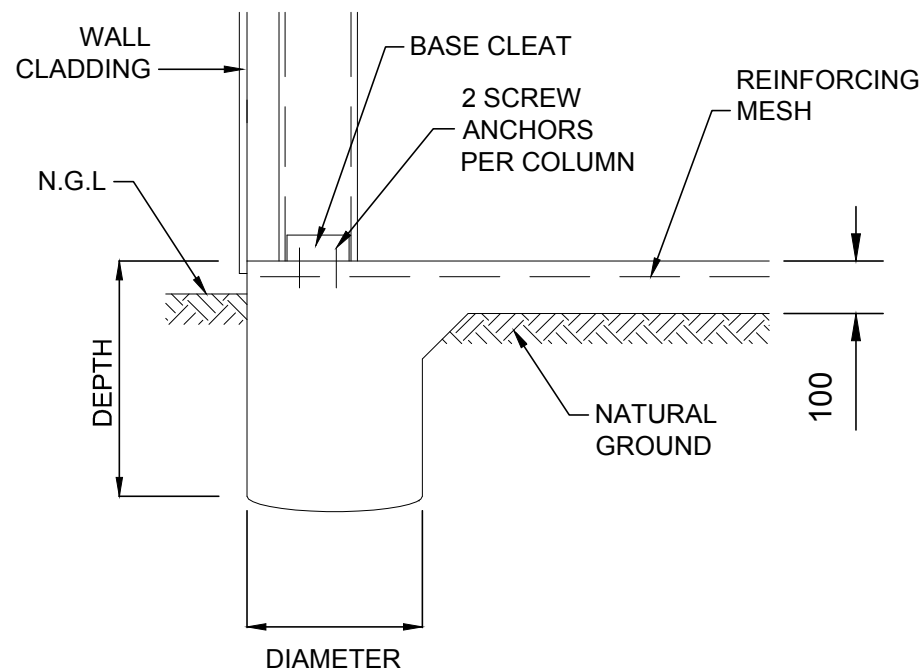
- GOVERNING CODE** : NATIONAL CONSTRUCTION CODE (NCC), LOADING TO AS1170 - ALL SECTIONS. BUILDING SUITABLE AS EITHER A PRIVATE GARAGE CLASS 10a, OR A FARM SHED (CLASS 7 OR 8), UNLESS OTHERWISE SPECIFICALLY NOTED. FOR USE AS A FARM SHED, IT MUST MEET THE FOLLOWING REQUIREMENTS:
  - BE LESS THAN 2000 SQM IN AREA (INCLUSIVE OF ANY MEZZANINE FLOOR AREA).
  - MUST BE LOCATED ON A FARM AND USED IN CONNECTION WITH FARMING PURPOSES.
  - BUILDING IS NOT TO BE OCCUPIED FREQUENTLY NOR FOR EXTENDED PERIODS BY PEOPLE, WITH A MAXIMUM OF 1 PERSON PER 200 SQM OR 2 PERSONS MAXIMUM IN TOTAL WHICHEVER IS THE LESSER.
- DRAWING OWNERSHIP** : THESE DRAWINGS REMAIN THE PROPERTY OF FBHS (AUST) PTY LIMITED. ENGINEERING SIGNATURE AND CERTIFICATION IS ONLY VALID WHEN BUILDING IS SUPPLIED BY A DISTRIBUTOR OF FBHS. DRAWINGS ARE PROVIDED FOR THE DUAL PURPOSE OF OBTAINING BUILDING PERMITS AND AIDING CONSTRUCTION. ANY OTHER USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM FBHS.
- DRAWING SIGNATURE REQUIREMENTS** : THESE DRAWINGS ARE NOT VALID UNLESS SIGNED BY THE ENGINEER. THE ENGINEER ACCEPTS NO LIABILITY OR RESPONSIBILITY FOR DRAWINGS WITHOUT A SIGNATURE. 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.
- CONTRACTOR RESPONSIBILITIES** : CERTIFIER AND CONTRACTOR TO CONFIRM (ON SITE) THAT THE WIND LOADINGS APPLIED TO THIS DESIGN ARE TRUE AND CORRECT FOR THE ADDRESS STATED IN THE TITLE BLOCK. 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 ONE OF THE UNDERSIGNING ENGINEERS. 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 IS 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.
- ENGINEERING** : THE ENGINEER / FBHS ARE NOT ACTING AS PROJECT MANAGERS FOR THIS DEVELOPMENT, AND WILL NOT BE PRESENT DURING CONSTRUCTION. THE UNDERSIGNING 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. THESE DOCUMENTS ARE STAMPED ONLY AS TO THE COMPONENTS SUPPLIED BY FBHS. IT IS THE RESPONSIBILITY OF THE PURCHASER TO COORDINATE DRAWINGS PROVIDED BY FBHS 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. NO ALTERATIONS TO THIS STRUCTURE (INCLUDING REMOVAL OF CLADDING) ARE TO BE UNDERTAKEN WITHOUT THE CONSENT OF THE CERTIFYING ENGINEER. OPENINGS SUCH AS WINDOWS AND DOORS NEED TO BE INSTALLED AS PER THE PRODUCT MANUFACTURER'S INFORMATION/DETAILS.
- 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.
- SOIL REQUIREMENTS** : SITE CLASSIFICATION TO BE A, S OR M ONLY. SOIL SAFE BEARING CAPACITY VALUE INDICATED ON DRAWING SHEET 4 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 Y 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.
- CLASS 10a or Class 7 FOOTING DESIGNS** : THE FOUNDATION DOCUMENTED IS ALSO APPROPRIATE FOR CLASS 10a or CLASS 7 BUILDING DESIGNS ON 'M-D', 'H', 'H-D' OR 'E' CLASS SOILS, IF TOTAL SLAB AREA IS UNDER 100m SQUARE AND THE MAXIMUM SLAB DIMENSION (LENGTH AND WIDTH) IS LESS THAN OR EQUAL TO 12m. PLEASE BE AWARE THAT THE SLAB DESIGN FOR H & E CLASS SOILS IN THESE INSTANCES ARE DESIGNED TO EXPERIENCE SOME CRACKING. THIS CRACKING IS NOT CONSIDERED A STRUCTURAL FLAW OR DESIGN ISSUE, AND IS SIMPLY COSMETIC IN NATURE. IF THIS IS A CONCERN TO THE CLIENT IT IS ADVISED THEY DISCUSS OTHER OPTIONS WITH THE RELEVANT DISTRIBUTOR PRIOR TO THE POURING OF THE SLAB.
- 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 & B1, 25MPa FOR EXPOSURE A2 & B2 AND 32MPa 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.
- 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 STRAMIT GENERAL FINISHES.
- FOOT TRAFFIC** : FOR ERECTION AND MAINTENANCE PLEASE NOTE THE FOLLOWING DEFINED FOOT TRAFFIC ZONES:
  - CORRUGATED: WALK ONLY WITHIN 200MM OF SCREW LINES. FEET SPREAD OVER AT LEAST TWO RIBS.
  - MONOCLAD: WALK ONLY IN PANS, OR ON RIBS AT SCREW LINES.

PROJECT DESIGN CRITERIA	
ROOF LIVE LOAD:	0.25 kPa
BASIC WIND SPEED:	VR 45 m/s
SITE WIND SPEED:	VsItB 33.2 m/s
WIND REGION:	Reg A
TOPOGRAPHY FACTOR, Mt:	1
SHIELDING FACTOR, Ms:	0.89
MAX GROUND SNOW LOAD:	N/A
MAX ROOF SNOW LOAD:	N/A
SITE ALTITUDE:	N/A
TERRAIN CATEGORY:	TCat 3
SOIL SAFE BEARING CAPACITY:	100 kPa
RETURN PERIOD:	1:500
LIMITING CPI 1:	-0.3
LIMITING CPI 2:	0
IMPORTANCE LEVEL:	2

DETAIL KEYS	
DK1	ENDWALL VERTICAL MULLION (SEE DETAIL C/5 FOR TOP CONN. AND F/5 FOR BASE CONN.)
DK2	FLYBRACING PER DETAIL L/5
DK3	X-BRACING IN ROOF ABOVE (SEE DETAIL M/5)
DK4	DOUBLE X-BRACING IN ROOF ABOVE (SEE DETAIL M/5)

SCHEDULE OF OPENINGS						
DOOR	OPENING WIDTH	OPENING HEIGHT	MAX TYPE	HEADER GIRT	OPENING JAMBS	WIND RATED
①	1810	2100	2.10H X 1.81 X0 STANDARD GLASS SLIDING DOOR	SINGLE	XSRDZ10027	YES
②	1810	2100	2.10H X 1.81 X0 STANDARD GLASS SLIDING DOOR	SINGLE	XSRDZ10027	YES

NOTES: 1) SEE SHEET 5 FOR DOOR OPENING FRAMING INFORMATION. 2) ALL DOOR SCHEDULE MEASUREMENTS ARE ACTUAL DOOR/WINDOW SIZE NOT OPENING SIZE.



450 x 300  
Diameter x Depth (mm)

N.G.L. - NATURAL GROUND LINE

Y	BORED LOCAL THICKENING DETAIL	DWG NO. SBOMA
---	-------------------------------	---------------

**S.Y.HARB ENGINEERING**

Dr. Simon Harb  
Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NPER  
Accredited Certifier

**Registered Professional Engineer 726821**  
**Dr. Simon Harb**  
MIEAust, Phd, CPEng (Civil & Structural) NPER

Signature: *[Signature]* Date: 6/1/23  
Registered on the NPER in the Category of Civil & Structural  
National Professional Engineers Register Section Three

4 OF 8 SHEET	JOB NO. MASH.56600	DATE 6/1/2023	CHECKED T/M/SH	DRAWN FDS	STEEL BUILDING BY
	NCC 2019				FOR AT

(CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY



Civil & Structural Engineers  
50 Punari Street  
Currarajong, 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

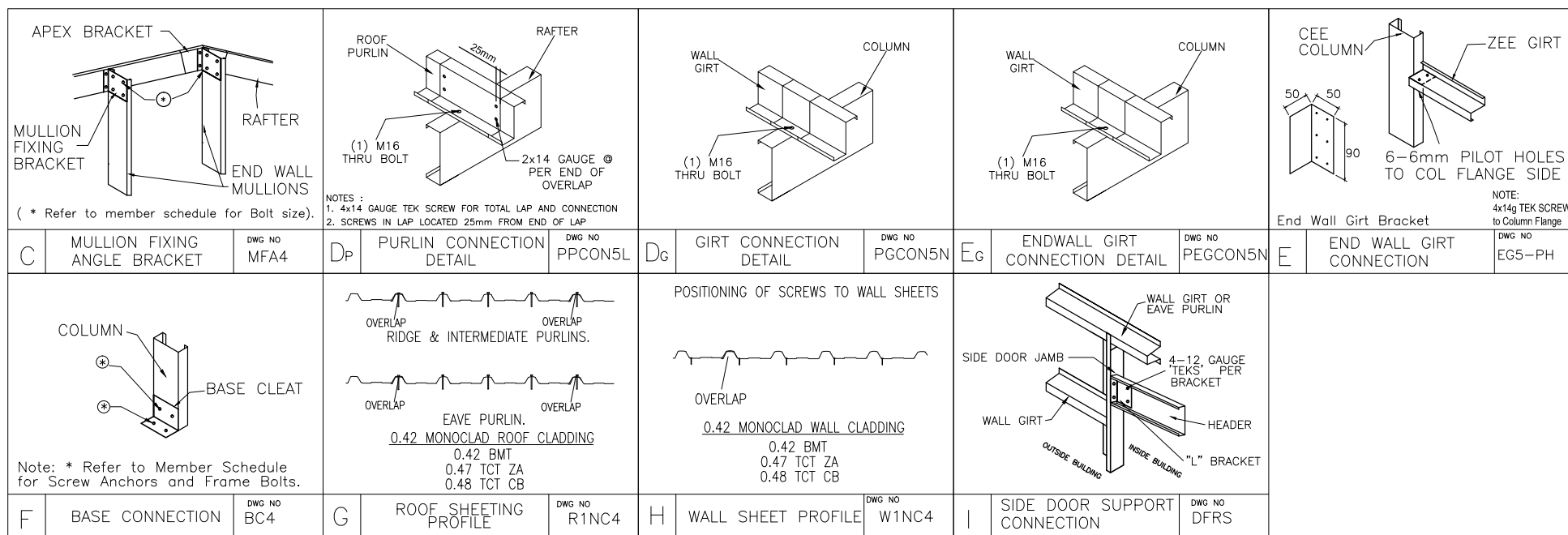
Regn. No. 2558980  
Regn. No. 9985  
Regn. No. 116373ES  
Regn. No. PE0002216  
Regn. No. CC5648M

Mr Timothy Roy Messer BE MIEAust RPEQ

Signature: *[Signature]*

Date: 6/1/2023  
Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



MEMBER AND MATERIAL SCHEDULE

1	END WALL RAFTER	Single C15012
2	C.S. FRAME RAFTER	Single C15012
3	END FRAME COLUMN (C1)	Single C15012
4	C.S. FRAME COLUMN (C1)	Single C15012
5	MULLION (C1)	Single C15012
6	ANCHOR BOLTS (# PER DETS.)	Screw Anchor 12mm x 100 Galv
7	EAVE PURLIN	C15012
8	TYP. ROOF PURLIN SIZE	Z10010
9	MAIN BLDG. PURLIN SPACING	1.140 m. (2 rows) (Max Allow. 1.500m)
10	MAIN BLDG. PURLIN LENGTH	3.57 m. (0.32m Overlap)
11	TYP. SIDEWALL GIRTS SIZE	Z10010
12	MAIN BLDG. SIDEWALL GIRTS SPACING	1.212 m. (2 rows) (Max Allow. 1.860m)
13	MAIN BLDG. SIDEWALL GIRTS LENGTH	3.55 m. (0.3m Overlap)
14	TYP. ENDWALL GIRTS SIZE	Z10010
15	MAIN BLDG. ENDWALL GIRTS SPACING	1.501 m. (2 rows) (Max Allow. 2.000m)
16	MAIN BLDG. ENDWALL GIRTS LENGTH	2.3 m. (0.3m Overlap)
17	FRAME SCREW FASTENERS	14-13x22 Hex C/S (SP HD 5/16" Hex Drive)
18	FRAME BOLT FASTENERS	PurIn Assy M12x30 Z/P
19	PURLIN/GIRTS FASTENERS	PurIn Assy M16x30 Z/P
20	X-BRACING STRAP AND FASTENERS	None required for this building. Cladding Diaphragm Sufficient.
21	WALL COLOUR	NIGHT_SKY
22	ROOF COLOUR	NIGHT_SKY
23	GLASS SLIDING DOOR COLOUR	NIGHT_SKY
24	DOWNPIPE COLOUR	NIGHT_SKY
25	GUTTER COLOUR	NIGHT_SKY
26	CORNER FLASHING COLOUR	NIGHT_SKY
27	BARGE FLASHING COLOUR	NIGHT_SKY
28	OPENING FLASHING COLOUR	NIGHT_SKY
29	OPEN BAY HEADER HEIGHT	0.5

"C.S." = CLEARSPAN "L." = LEFT "R." = RIGHT

S.Y.HARB ENGINEERING

Dr. Simon Harb

Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NPER  
Accredited Certifier

Registered Professional Engineer 726821

Dr. Simon Harb  
MIEAust, Phd, CPEng (Civil & Structural)



Signature:

Date: 6/1/23

Registered on the NPER in the Category of  
Civil & Structural  
National Professional Engineers Register Section Three

5	OF	8
SHEET		
JOB NO.	MASL56600	NCC 2019
DATE	6/1/2023	
CHECKED	TM/SH	
DRAWN	FDS	

STEEL BUILDING BY (CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY



**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

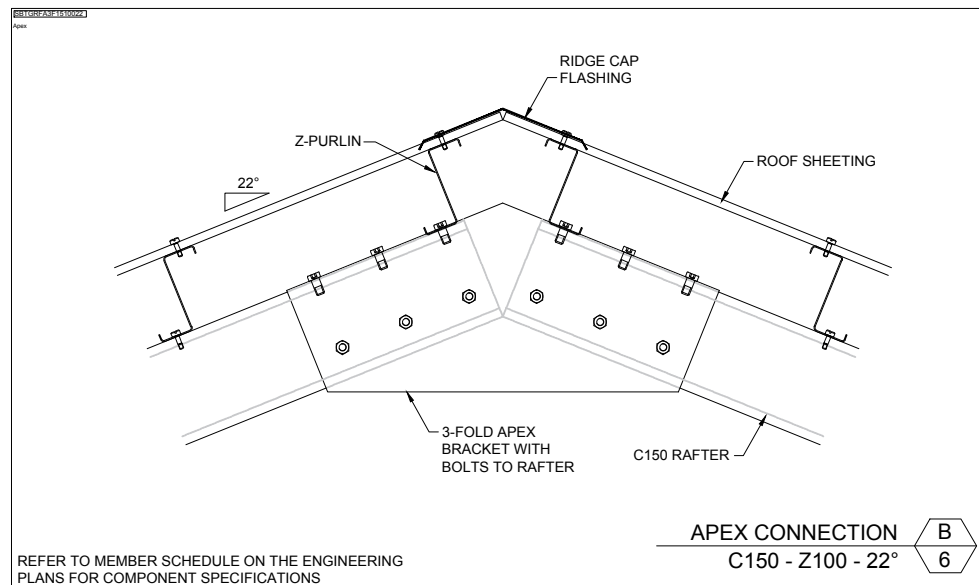
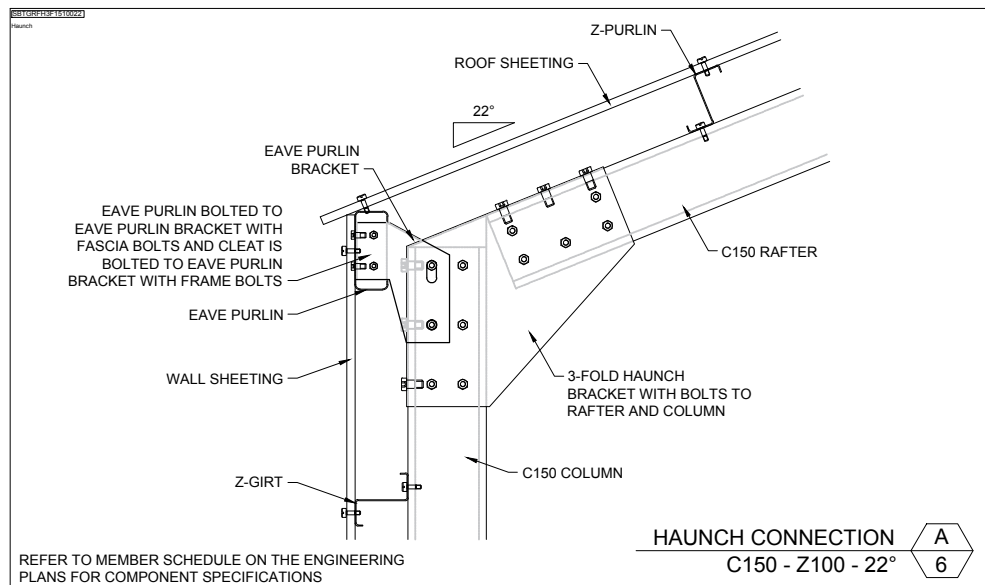
Registered Chartered Professional Engineer  
Registered Professional Engineer (Civil & Structural) QLD  
Registered Certifying Engineer (Structural) N.T.  
Registered Engineer - (Civil) VIC  
Registered Engineer - (Civil) TAS

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

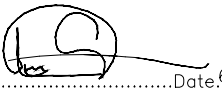
Mr Timothy Roy Messer BE MIEAust RPEQ  
Signature:

Date: 6/1/2023  
Registered on the NPER in the areas of practice  
of Civil & Structural National Professional  
Engineers Register

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



**S.Y.HARB ENGINEERING**  
Dr. Simon Harb  
Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NPER  
Accredited Certifier

**Registered Professional Engineer 726821**  
**Dr. Simon Harb**  
MIEAust, Phd, CPEng (Civil & Structural)  
NPER  
Signature:  Date: 6/1/23  
Registered on the NPER in the Category of Civil & Structural  
National Professional Engineers Register Section Three

6 OF 8 SHEET  
JOB NO. MASL56600  
DATE 6/1/2023  
CHECKED T/M/SH  
DRAWN FDS


STEEL BUILDING BY (CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY



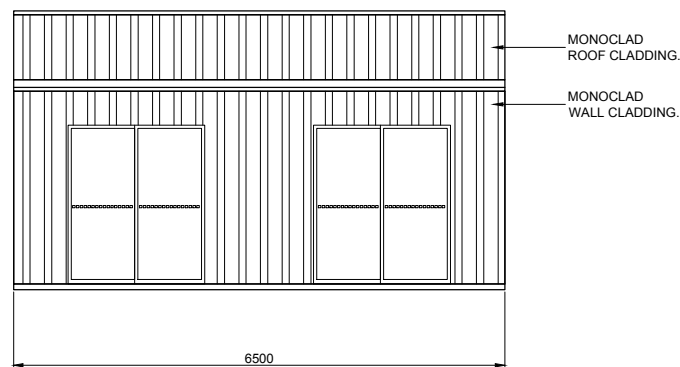
**NORTHERN CONSULTING engineers**  
Civil & Structural Engineers  
50 Punari Street  
Currajong, Qld 4812  
Fax: 07 4725 5850  
Email: design@nceng.com.au  
ABN 341 008 173 56

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

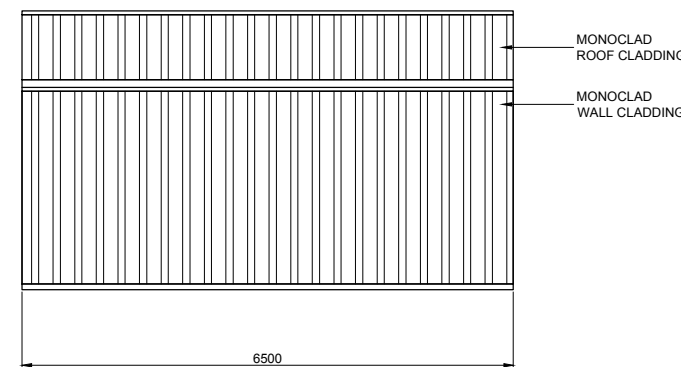
Regn. No. 2558980  
Regn. No. 9985  
Regn. No. 116373ES  
Regn. No. PE0002216  
Regn. No. CC5648M

Mr Timothy Roy Messer BE MIEAust RPEQ  
Signature:   
Date: 6/1/2023  
Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register

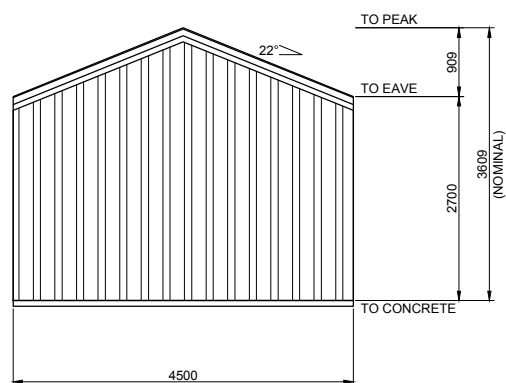
The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.



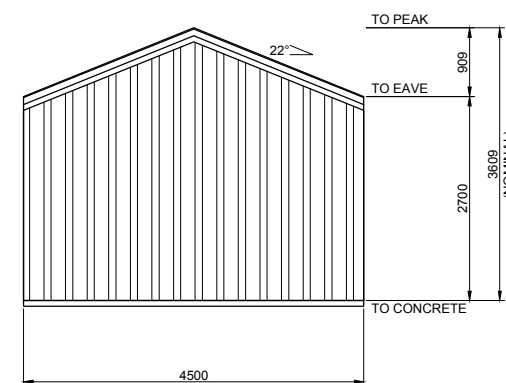
1  
7 SIDEWALL EXTERIOR ELEVATION  
SCALE: 1 = 100



2  
7 SIDEWALL EXTERIOR ELEVATION  
SCALE: 1 = 100



4  
7 ENDWALL EXTERIOR ELEVATION  
SCALE: 1 = 100



3  
7 ENDWALL EXTERIOR ELEVATION  
SCALE: 1 = 100

BUILDING COLOURS

WALL	NIGHT SKY
ROOF	NIGHT SKY
GLASS SLIDING DOOR	NIGHT SKY
DOWNPIPE	NIGHT SKY
GUTTER	NIGHT SKY
CORNER FLASHING	NIGHT SKY
BARGE FLASHING	NIGHT SKY
OPENING FLASHING	NIGHT SKY

**S.Y.HARB ENGINEERING**

Dr. Simon Harb

Civil & Structural Engineer  
B.E., MIE Aust CP Eng., Phd, NPER  
Accredited Certifier

Registered Professional Engineer 726821  
Dr. Simon Harb

MIEAust, Phd, CPEng (Civil & Structural)



Signature: *[Signature]* Date: 6/1/23

Registered on the NPER in the Category of  
Civil & Structural  
National Professional Engineers Register Section Three

8 OF 7 SHEET

JOB NO. MASL56600  
NCC 2019

DATE 6/1/2023

CHECKED TM/SH

DRAWN FDS

STEEL BUILDING BY (CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY

FOR AT

SHED SAFE

**fairdinkum SHEDS**

**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: *[Signature]*

Date: 6/1/2023

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

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited with whom copyright resides. The local distributor you are dealing with is an authorised independent distributor of Fair Dinkum Sheds' products and enters into agreements with its customers on its own behalf and not as an agent of Fair Dinkum Sheds.

# GUIDE TO THE INSTALLATION OF TEMPORARY BRACING

(REFER TO INSTALLATION GUIDE MANUAL FOR THE TWO METHODS OF CONSTRUCTION)

**NOTES:**

**BRACING MATERIALS** - THE SHED ERECTOR TO SUPPLY SPECIFIC BRACING. SUITABLE RIGID MEMBERS CAPABLE OF TENSION AND COMPRESSION OR OPPOSING CHAINS OR OPPOSING LOAD RATED RATCHET STRAPS TO BE USED. (RIGID BRACING AS SHOWN ON DIAGRAM) ROPE BRACING SUITABLE ONLY FOR SMALLER STRUCTURES IN IDEAL CONDITIONS.

**BRACING LOCATION** - TEMPORARY BRACING TO BE ERECTED AS CLOSE TO 45 DEGREE ANGLE AND FIXED TO THE TOP OF THE COLUMN OR MULLION TO ACHIEVE THE OPTIMUM EFFECTIVENESS. IF THERE IS NOT ENOUGH SPACE FOR A 45 DEGREE ANGLE, THEN 20 DEGREE ANGLE IS TO BE THE MINIMUM ANGLE ALLOWED (REFER TO DIAGRAM). RIGID TEMPORARY BRACING MEMBER TO BE BOLTED TO HEAVY ANGLE PEGS HAMMERED INTO THE GROUND OR TO A BRACKET, MASONRY ANCHORED TO THE SLAB.

**BRACING REMOVAL** - TEMPORARY BRACING TO REMAIN IN PLACE UNTIL CLADDING IS FULLY INSTALLED WHERE POSSIBLE. IN NO CASE SHOULD TEMPORARY BRACING BE REMOVED UNTIL ALL PURLINS, GIRTS (AND PERMANENT CROSS BRACING WHERE USED) ARE FIXED.

**SITE SAFETY** - DUE CONSIDERATION TO BE GIVEN TO SITE SAFETY IN REGARD TO LOCATIONS OF BRACING AND PEGS.

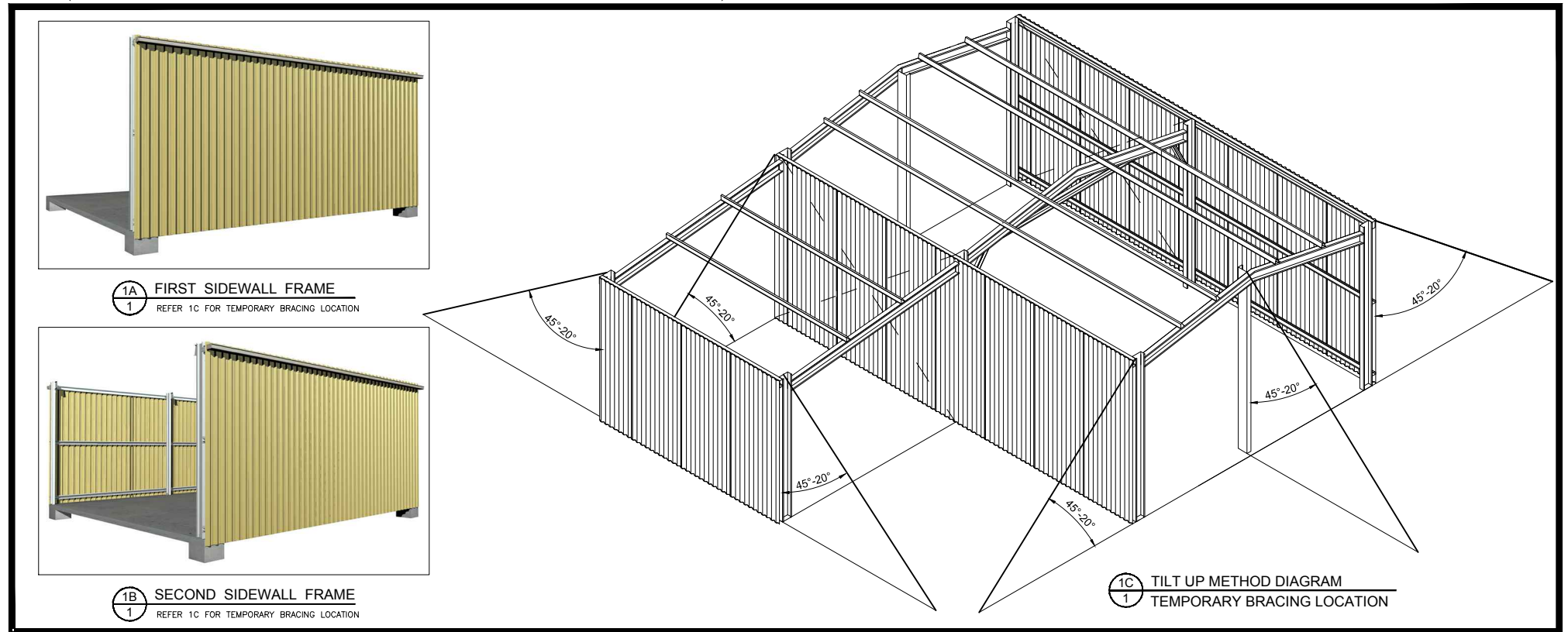
**GUIDE APPLICATION** - TEMPORARY BRACING AS DESCRIBED IS A MINIMUM REQUIREMENT FOR AN AVERAGE, STANDARD SITE CONDITION. PROVIDE ADDITIONAL BRACING FOR MORE SEVERE AND/OR HIGH EXPOSURE SITE CONDITIONS. ADDITIONAL BRACING TO BE USED AS AND WHERE NECESSARY TO ENSURE THAT ENTIRE FRAME IS RIGID THROUGHOUT CONSTRUCTION. RESPONSIBILITY FOR ENSURING STABILITY OF STRUCTURE REMAINS WITH THE BUILDER.

**TILT UP METHOD**  
FOR STRUCTURES UNDER 9M SPAN, LESS THAN 3M HIGH AND LESS THAN 12M LONG

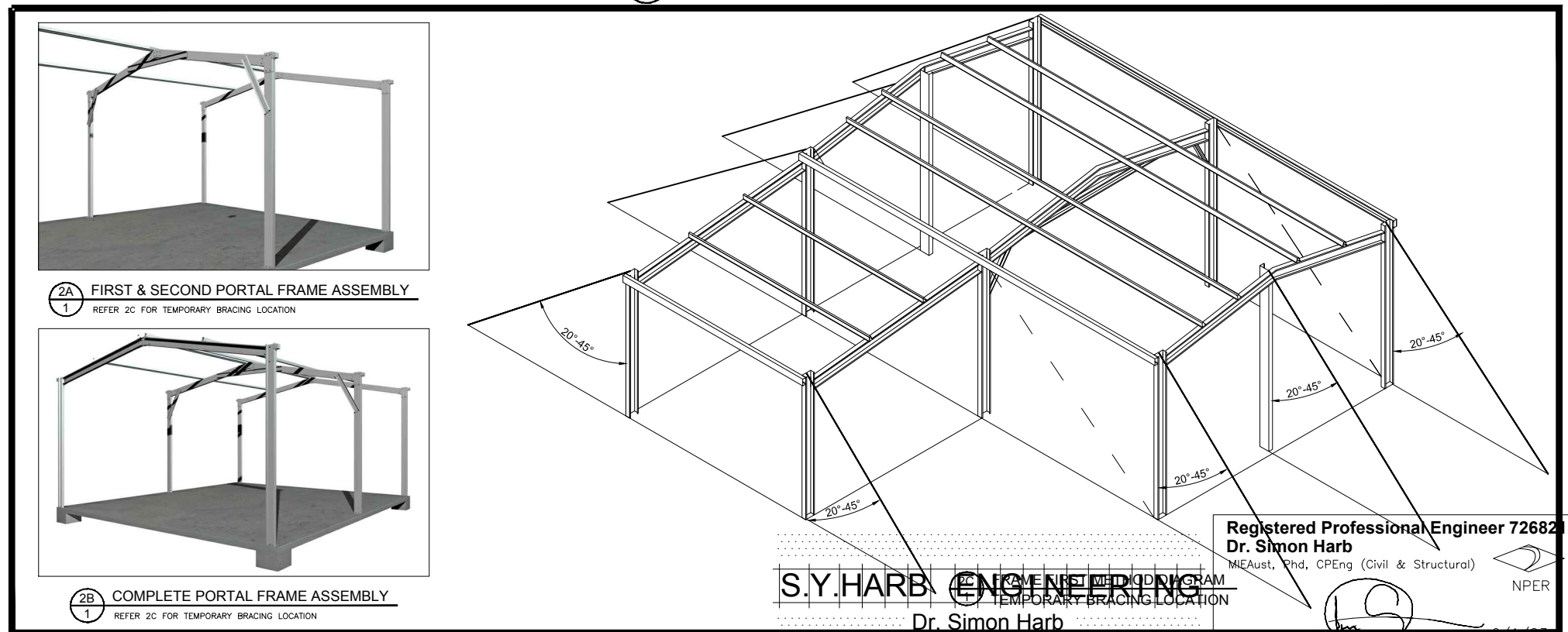
- A. ASSEMBLE THE FIRST SIDEWALL FRAME (COMPLETE WITH WALL SHEETING, BRACING AND GUTTER) ON THE GROUND AND LIFT ASSEMBLED SIDEWALL FRAME INTO POSITION. FIX OFF TEMPORARY SIDE BRACING TO EACH END (REFER TO DIAGRAM). FIX BASE CLEATS.
- B. ASSEMBLE THE SECOND SIDEWALL FRAME AS PER FIRST SIDEWALL FRAME. LIFT INTO POSITION. FIX OFF TEMPORARY WALL BRACING TO EACH END (REFER TO DIAGRAM) FIX BASE CLEATS.
- C. FIX GABLE END RAFTERS TO COLUMNS. PROP APEX UNTIL ENDWALL MULLION AND APEX TEMPORARY BRACE ARE FIXED OFF. IF NO MULLION IS REQUIRED THEN PROP AND BRACE APEX UNTIL CLADDING IS COMPLETE.
- D. INSTALL REMAINING RAFTERS. AS EACH RAFTER PAIR IS INSTALLED, AT LEAST ONE PURLIN PER 3M OF RAFTER LENGTH IS TO BE INSTALLED TO SECURE RAFTERS.
- E. INSTALL REMAINING PURLINS
- F. INSTALL KNEE AND APEX BRACES IF AND WHERE APPLICABLE.
- G. REPEAT FOR LEANTO'S.

**FRAME FIRST METHOD**  
FOR STRUCTURES OVER 9M SPAN, GREATER THAN 3M HIGH AND GREATER THAN 12M LONG

- A. ASSEMBLE PORTAL FRAMES ON THE GROUND (WITH KNEE AND APEX BRACES IF AND WHERE APPLICABLE). LIFT THE FIRST PORTAL FRAME ASSEMBLY INTO POSITION. FIX OFF TEMPORARY END BRACING (REFER TO DIAGRAM). FIX BASE CLEATS.
- B. PROP APEX UNTIL ENDWALL MULLION AND APEX TEMPORARY BRACE ARE FIXED OFF. IF NO MULLION IS REQUIRED THEN PROP AND BRACE APEX UNTIL CLADDING IS COMPLETE.
- C. THE SECOND PORTAL FRAME ASSEMBLY TO BE LIFTED INTO POSITION. FIX EAVE PURLINS AND AT LEAST ONE PURLIN PER 3M OF RAFTER TO SECURE FRAME ASSEMBLY. FIX BASE CLEATS. FIX TEMPORARY SIDEWALL BRACING.
- D. STAND REMAINING PORTAL FRAME ASSEMBLY AS PER STEP C, FIXING TEMPORARY SIDE WALL BRACING TO EVERY SECOND BAY. BRACE OTHER END PORTAL FRAME AS PER FIRST PORTAL FRAME.
- E. INSTALL REMAINING PURLINS AND GIRTS.
- F. REPEAT FOR LEANTO'S.



1 TILT UP METHOD DIAGRAM  
SCALE: NTS



2 FRAME FIRST METHOD DIAGRAM  
SCALE: NTS

**S.Y.HARB ENGINEERING**  
Dr. Simon Harb  
Registered Professional Engineer 72682  
MIEAust, PhD, CPEng (Civil & Structural)  
B.E., MIE Aust, CP Eng., PhD, NPER  
Accredited Certifier

Signature: *[Signature]* Date: 6/1/2023  
Registered on the NPER in the Category of Civil & Structural  
National Professional Engineers Register Section Three

8 OF 8 SHEET	JOB NO. MASH156600	DATE 6/1/2023	CHECKED T/M/SH	DRAWN FDS	STEEL BUILDING BY
	NCC 2019				FOR AT

(CONTACT)  
**THE SHED KING...**  
1300130102  
**LUKE MITCHELL**  
21 ALTAIR AVENUE WEST  
HOPE VALLEY

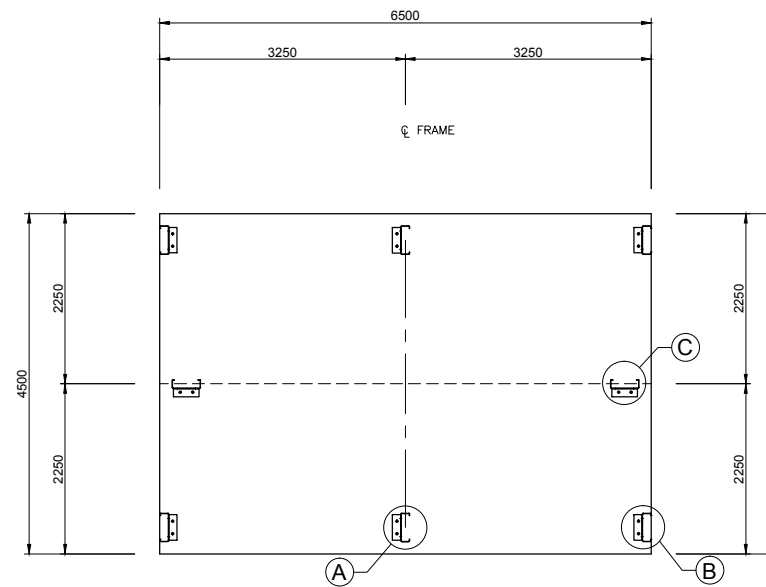
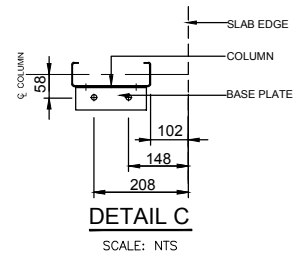
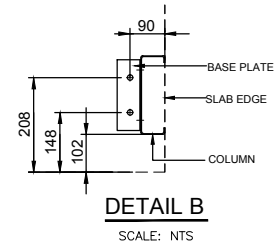
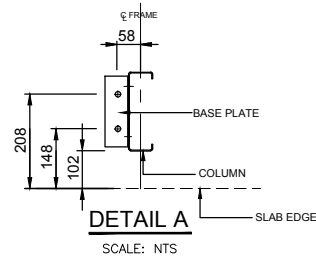
**fairdinkum SHEDS**  
SHED SAFE

**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

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

Mr Timothy Roy Messer BE MIEAust RPEQ  
Signature: *[Signature]*  
Date: 6/1/2023  
Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register

The design and detail shown on these drawings are applicable to this project only and may not be reproduced in whole or any part or be used for any other purpose without the written permission of FBHS (Aust) Pty Limited (FBHS) with whom copyright resides. The local distributor or franchisee you are dealing with is an authorised independent distributor or franchisee of FBHS' products and they enter into agreements with their customers on their own behalf and not as an agent for FBHS.



1 BOLT LAYOUT PLAN  
1 SCALE: 1 = 100

IF YOU HAVE A ROLLER DOOR IN THE GABLE END OF YOUR SHED, CONTACT YOUR DISTRIBUTOR TO SEE IF MULLION NEEDS TO BE ROTATED FOR USE AS A DOOR JAMB.

NOT PART OF COUNCIL APPLICATION DOCUMENTATION

JOB NO. MASL56600	DATE 6/1/2023	CHECKED TWSH	DRAWN FDS	STEEL BUILDING BY	<b>THE SHED KING...</b> 1300130102 <b>LUKE MITCHELL</b> 21 ALTAIR AVENUE WEST HOPE VALLEY	 	<h1>BOLT LAYOUT PLAN</h1>
				FOR			
				AT			

# DEVELOPMENT APPLICATION FORM

South Australian Development Act

Regulation 88

Planning Development Infrastructure

Regulation Section 61

## CERTIFICATE OF COMPLIANCE - DESIGN

MASL56600  
LUKE MITCHELL

To:

Relevant Building Surveyor: City Of Tea Tree Gully

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Independent Certifier Details :

From : Dr Simon Harb

**Postal Address:** S.Y HARB ENGINEERING  
Civil & Structural Engineer  
12 Wilson Street, Strathfield, NSW 2135

Accreditation No: NPER Reg. No. 726821

Specialty area of expertise : Structural Engineering

### Details of work

Customer Address : 21 ALTAIR AVENUE WEST City/Suburb/Town HOPE VALLEY

Postcode : 5090 Lot No. \_\_\_\_\_ Certificate Title No. ?

Steel Portal Frame Structure. 4.5m span x 6.5m O/A length x 2.7m eaves height.  
Consisting of 2 bays at 3.25m spacing.

Produced by the MultiBuild building design program (previously certified by me).  
All Components to equivalent AS1170.2 rating.

### Basis of Certification

Detail the basis for giving the Certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications were relied upon.

Region= Reg A Terrain Category= TCat 3 Importance level= 2 NCC Wind Class= N/A V= 34

Annual probability of exceedance wind = 1:500  $V^R =$  45 Design Wind Speed = 34 m/s

Design Roof Live load= 0.25 kPa Internal pressure Coefficients Cpi = -0.3 & 0

Certificate type : Structure & Foundations only

In issuing this certificate, Part 7 - Assessment - processes and assessment facilitation, Division 6 - Other matters,  
61 - Certificate of independent technical expert in certain cases the following matters are relevant:

Design Documents : 'Fair Dinkum Sheds' Structural Drawings for this project  
to be read in conjunction with sheets #1 to 8 Prepared by : FDS Dated : 6/1/2023  
For Door and Window Details see sheet #5  
NCC Building Classification = Class 10

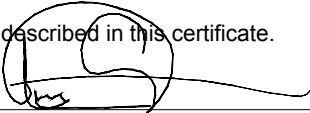
Relevant Calculations : NA

References: AS/NZS 4600-2018, AS 1170.1 & 2-2011, AS 2870-2011. AS 3600-2018, AS 3623-1993, AS 1288-2006, AS1562.1-1992  
Part B1- Volume 1, or Part 2.1 Structural Provisions - Volume 2 of the National Construction Code and the matters referred to in  
Section E Volume 1 of the National Construction Code - Amendment 1 2019

### Substance of Certificate :

The materials, forms of construction and systems to which the details, particulars, plans, drawings or specifications relate will, if installed or carried out in accordance with the details, particulars, plans, drawings or specifications, comply with the requirements of the National Construction Code of Australia.

I certify the matters described in this certificate.

Certifier :   
DR SIMON HARB REGISTRATION NO. 726821

Date : 6/1/2023

Designer :   
TIMOTHY R MESSER REGISTRATION NO. 2558980

Date : 6/1/2023