	4000 .	2 2 7 14000 (SIDEWALL) 6000	4000
	¢ FRAME 2	ę frame	3
		$ \begin{array}{c} 1 \\ 2 \\ 7 \end{array} $ ATION PLAN AND MEMBER LAYOU	IT
	SCALE: 1 = 10	0	_
ROOF STRAP BRACING TO BE CONNECTED TO THE PURLIN CLOSE ROOF STRAP BRACING CAN BE PLACED FROM EITHER END OF TH	ST TO THE LINE OF THE END WALL MU E BUILDING PROVIDING THE STRAP PA	ILLION TTERN REMAINS AS PER PLANS	3
STEEL BUILDING BY MA STEEL FOR FOR TAAS23883 SHEET SHAR SHAR SHAR SHAR SHAR SHAR SHAR SHAR	PTY LTD (LIC 2255160 02 6226 4377 DAM GREENWOOD 9 ISABEL DRIVE JRRUMBATEMAN	C)	Registered Carttered Professional Engineer Registered Cortifying Engineer (Civil & Structural) Registered Certifying Engineer (Civil & Structural) Registered Certifying Engineer (Civil X Structural) Registered Engineer - (Civil) VIC

IF IN DOUBT, ASK.

MEMBER LEGEND

C1	C20024
C2	2C20024
C3	C20019

Mr Timothy Roy Messer BE MIEAust RPEQ Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Signature nail: design@nceng.com.au ABN 341 008 173 56 12/4/2024 Date Regn. No. 2558980 Regn. No. 9985 Regn. No. 116373ES Regn. No. PE002216 Regn. No. CC5648M Registered on the NPER in the areas of practice LD of Civil & Structural National Professional Engineers Register





Refer to Sheet #4 for concrete specification.

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Regn. No. PE0002216	
Regn. No. CC5648M	Engineers Register

GOVERNING CODE : NATIONAL CONSTRUCTION CODE (NCC), LOADING TO AS1170 - ALL SECTIONS. BUILDING SUITABLE AS EITHER A PRIVATE CARAGE 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 AFRA (INCLUSIVE OF ANY MEZZANINE FLOOR AREA). MUST BE LOCATED ON A FARM AND USED IN CONNECTION WITH FARMING PURPOSES. BUILDING IS NOT TO BE COCCUPIED FREQUENTION FOR EXTENDED PERIODS BY PROPLE, WITH A MAXIMUM OF 1 PERSON PER 200 SQM OR 2 PERSONS MAXIMUM IN TOTAL WHICHEVER IS THE LESSER. DRAWING COMPRESSION FOR 200 SQM OR 2 PERSONS MAXIMUM IN TOTAL WHICHEVER IS THE LESSER.

- DRAWING OWNERSHIP : THESE DRAWINGS REMAIN THE PROPERTY OF FEHS (AUST) PTY LIMITED. ENGINEERING SIGNATURE AND DRAWING OWNERSHIP STRUCTURE TO STRUCT AND A DISTRIBUTION OF FEHS. DRAWINGS CERTIFICATION IS ONLY VALID WHEN BUILDING IS SUPPLIED BY A DISTRIBUTOR OF FEMS. 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 FEMS.
- REPROJUCTION IS FROMEDIATED WITHOUT WRITTEN AFFRONAL FROM FERS. DRAWINGS SICONTORE 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 CONDUCIL WITHIN 21 DAYS OF THIS DATE. THIS IS TO ENSURE THAT ONLY CURRENT DRAWINGS ARE IN CIRCULATION. CONDUCTING DESCENDENT WITHOUT AND A SIGNATURE.
- 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 FRIOR TO START OF WORK. CONTRACTOR MIST NOT MAKE ANY DEVIATION FROM THE FROVIDED PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL DEDUCING THE INFORMATION FROM THE FROM THE PROVIDED FLANS WITHOUT THY DPC CHARGE MAPPENDAL DEDUCING THE INFORMATION FROM THE FROM THE PROVIDED FLANS WITHOUT INTY DPC CHARGE MAPPENDAL FROM ONE 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
- 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 FUTHER DIRECTIONS ON CONSTRUCTION THE CONTRACTOR SHOULD CONSULT THE APPROPRIATE INSTRUCTION MANUAL.
- THE ENGINEER / FBHS ARE NOT ACTING AS PROJECT MANAGERS FOR THIS DEVELOPMENT, AND WILL NOT BE PRESENT
- DURING CONSTRUCTION. DURING CONSINCTION. THE UNDERSIGNING ENGINEERS HAVE REVIEWED THIS BUILDING FOR CONFORMITY ONLY TO THE STRUCTURAL DESIGN FORTIONS 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
- THESE DOLOMENTS ARE STAMPED ONLY AS TO THE COMPONENTS SUPPLIED BY PHEN. IT IS THE RESERVISIBILITY OF THE PRICHASES TO COORDINGE DRAININGS PROVIDED BY PHEN WITH OTHER PLANS AND/OR OTHER COMPONENTS THAT ARE PART OF THE OVERALL PROJECT. IN CASES OF DISCREPANCIES, THE LAREST DRAINES PROVIDED BY FENS 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. THE BUILDING IS DESIGNED AS A STAND-ALONE BUILDING, NOT RELYING ON ANY ADJACENT BUILDING. IF THE PERMANENT OPENING IS OBSTRUCTED BY ANY ADJACENT BUILDING AND MY ADJACENT BUILDING. FO SATD OPENING.

- PERMANENT OPENING IS OBSTRUCTED BY ANY ADJACENT BUILDING AND WITHIN A DISTANCE OF 0.5M OF SAID OPENING, THE DESIGN SHOULD BE REFERRED TO THE DESIGN ENGINEER FOR REVIEW OF INTERNAL PRESSURES AND POSSIBLE REDESTON 6. 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.
- BY THE LOCAL BUILDING DEPARTMENT SHALL BE CONDUCTED AT THE OWNER'S EXPENSE. SOIL REQUERDENTS : 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. REGRADLESS OF DEFILI 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 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:
- CLASS 10a or CLASS / FOUTING DESIGNS: THE FOURDARTICD DOCUMENTED IS ALSO APPROPRIATE FOR CLASS 10a or CLASS 7 BUILDING DESIGNS ON 'M-D', 'H', 'H-D' OR 'E' CLASS SOILS, IF TOTAL SLAD AREA IS UNDER 100m SQUARE AND THE MAXIMUM SLAD DIMENSION (LENGTH AND WIDTH) IS LESS THAN OR EQUAL TO 12m. PLEASE BE AWARE THAT THE SLAD 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 COMMETTIC IN NUTURE. IF THIS IS A CONCERN TO THE CLENT IT IS ADVISED THEY DISCUSS OTHER OPTIONS WITH THE RELEVANT DISTRIBUTOR FRIOR TO THE POURING OF THE SLAD.
- CONCRETE REQUIREMENTS
- ALL CONCRETE DETAILS AND PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH AS2870 AND AS3600.CONCRETE
- ALL CONCRETE DETAILS AND FLACEMENT SHALL BE PERFORMED IN ACCONTANCE WITH AS28/0 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. SLIMP TO BE 80mm +-15mm. SLABS TO BE CURED FOR 7 DAYS BY MATERING OR COVERING WITH A PLASTIC MEMBRANE, AFTER WHICH CONSTRUCTION CAN BEGIN, DUE CARE GIVEN NOT TO OVER-TIGHTEN HOLD DOWN BOLTS. GIVEN ALLOWABLE SOLL 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 1202 AB102 G AB 1204 ALL DEMONDORING CONCEPTED DE ALLOWER 2000 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 <= lnm fy = 550MPa, GAUGE > lnm <1.5mm fy = 500MPa, GAUGE >= 1.5mm fy = 450MPa). NO WELDING IS TO BE PERFORMED ON THIS BUILDING.
- STRUCTURAL MEMBERS AND CONNECTIONS DESIGNED TO AS4600. ALL BOLT HOLE DIAMETERS TO STRAMIT GENERAL
- 11. FOOT TRAFFIC

9.

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 40.9 m/s WIND REGION: Reg A3 TOPOGRAPHY FACTOR, Mt: 1 SHIELDING FACTOR, Ms: 1 MAX GROUND SNOW LOAD: N/A MAX ROOF SNOW LOAD: N/A SITE ALTITUDE: N/A TERRAIN CATEGORY: TCat 2.01 SOIL SAFE BEARING CAPACITY: 100 kPa RETURN PERIOD: 1:500 LIMITING CPL 1: -0.58 LIMITING CPI 2: 0.62 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						
$\overrightarrow{\text{DK3}}$ X-bracing in roof above (see detail a/6)						
DK4 DOUBLE X-BRACING IN ROOF ABOVE (SEE DETAIL A/6)						
SCHEDULE OF OPENINGS						
DOOR	OPENING	SIZE MAX	OPENING	HEADER	OPENING	WIND
DOOK	WIDTH	HEIGHT	TYPE	GIRT	JAMBS	RATED
1	3660	3480*	3.50H X 3.76 CB PLANETARY GEAR *SERIES B	SINGLE	Z20015P	NO
2	3000	3480*	3.50H X 3.10 CB DIRECT DRIVE *SERIES B	SINGLE	Z20015P	NO
3	2710	2480*	2.50H X 2.77 CB *SERIES A #	SINGLE >	(SRDZ15042	2 NO

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

* ROLLER DOOR OPENING HEIGHT DEPENDENT ON FINAL BUILD LOCATION

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34 OPEN BAY HE

BAY	WIDTH
1	4m
2	6m
3	4m



MEMBER AND MATERIAL SCHEDULE

FTER	Single C20019
AFTER	Double C20019
OLUMN (C1)	Single C20024
OLUMN (C2)	Double C20024
	Single C20019
NEE BRACE	Single C20019 @ 1.53 LONG 5 bolts each end
HEIGHT UP COLUMN	3.19m
LENGTH UP RAFTER	1.10m
PEX BRACE	Single C20019 @ 3.37 LONG 3 bolts each end
IN FROM RAFTER END	1.68m
TS (# PER DETS.)	Screw Anchor 16mm x 100 Galv
	C15019 (Eave Purlin Bracket 0mm from top of column)
JRLIN SIZE	Z15015 (1 rows of bridging)
URLIN SPACING	0.993 m. (5 rows) (Max Allow. 1.000m)
BRIDGING	Tophat 64 x 0.75
L GIRT SIZE	Z15015 (1 rows of bridging)
IDEWALL GIRT SPACING	0.744 m. (5 rows) (Max Allow. 0.850m)
RT BRIDGING	Tophat 64 x 0.75
L GIRT SIZE	Z15015
NDWALL GIRT SPACING	0.719 m. (6 rows) (Max Allow. 0.783m)
NDWALL GIRT LENGTH	4.95 m. (0.3m Overlap)
W FASTENERS	14-13x22 Hex C/S (SP HD 5/16' Hex Drive)
FASTENERS	Purlin Assy M12x30 Z/P
ASTENERS	Purlin Assy M16x30 Z/P
FRAP AND FASTENERS	38 x 1.6mm Strap with 5 x 14g Tek Screws Each End
2	NIGHT_SKY
R	NIGHT_SKY
RCOLOUR	NIGHT_SKY
DLOUR	NIGHT_SKY
OUR	NIGHT_SKY
SHING COLOUR	NIGHT_SKY
IING COLOUR	NIGHT_SKY
SHING COLOUR	NIGHT_SKY
ADER HEIGHT	0.5

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

PURLIN AND GIRT LENGTHS

PURLIN LENGTH	GIRT LENGTH
4.6 m. (0.6m Lap)	4.3 m. (0.3m Lap)
6.4 m. (0.4m Lap)	6.3 m. (0.3m Lap)
4.6 m. (0.6m Lap)	4.3 m. (0.3m Lap)

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	Regn. No. PE0002216	
	Regn. No. CC5648M	Engineers Register







NOT PART OF COUNCIL APPLICATION DOCUMENTATION	IF YOU HAVE A ROLLER DISTRIBUTOR TO SEE II	C DOOR IN THE GABLE END OF YOUR OF MULLION NEEDS TO BE ROTATED F
VAS2388 VAS2388 VAS2388 LOB PO TM TM TM TM TM TM TM TM TM TM	SHEP accreand	BOLT LAY



SLAB EDGE

OLUM!

ASE PLATE



1 BOLT LAYOUT PLAN SCALE: 1 = 100



<u>+</u>_1

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YOUT PLAN

SHED, CONTACT YOUR FOR USE AS A DOOR JAMB.