



Lysaght Building Solutions trading as Ranbuild
ABN 61 103 232 444
Level 1, 12 Beaumont Street Hamilton NSW 2303
Telephone +61 2 4962 4311
Facsimile +61 2 4962 3421
www.ranbuild.com.au

Enquiries to: Alexander Filonov

26th June 2024

The Manager
Ranbuild
PO Box 170
HAMILTON NSW 2303



Dear Sir/Madam,

Re: STRUCTURAL ADEQUACY OF STEEL FRAMED BUILDING

Client: Amber Blundell
Ranbuild Job No.: 431790
Type: Deluxe
Location: 77 Mayne St GULGONG NSW 2852
Plans: ENG1/1-431790, ENG2/1-431790, ENG3/1-431790, ENG3/2-431790, ENG4/1-431790,
ENG5/1-431790, ENG6/1-431790, 431790-GA

Being a professional engineer within the meaning of NCC 2022 Volume Two, Part A5G3 with Ranbuild Sheds we have undertaken a structural analysis of the steel framed building as described above. These plans were analysed in accordance with NCC 2022 Volume Two, Under Part A5G3 as Evidence of Suitability, Schedule 2 Referenced Documents : AS/NZS 1170.1, AS/NZS 1170.2, AS/NZS 1170.4, AS 4100, AS 2870, AS 1562 Part 1 and AS/NZS 4600.

Building Class: 10a

Based on our structural analysis, we are satisfied that the standard engineering drawings attached can be used for the above site.

The following modifications are required and supersede where applicable any standard engineering drawings:

- C1, R1 = C15019

Yours faithfully,

Alexander Filonov
MIEAust, CPEng, NPER, RPEQ 8094, CC4719P, PE 0003374
Engineering Manager
Lysaght Building Solutions

STRUCTURAL STEELWORK SCHEDULE			CONNECTIONS		
MARK	DESCRIPTION	SECTION	BASE	EAVES	TOP
C1	COLUMN - UNCLAD FRAME	C15015	FB1	KN1	
C2	COLUMN - CLAD FRAME	C15010	FB1	KN1	
C3	COLUMN - END	C20015	EB2		ER1
CS	COLUMN STIFFENER	C10010			
R1	RAFTER - UNCLAD FRAME	C15012		KN1	AP1
R2	RAFTER - CLAD FRAME	C15010	RA1	KN1	AP1
DM1	MULLION - ROLLER DOOR	C15010	EB1	DM1	MC2
RH2	HEAD - ROLLER DOOR	TS6160 + TS6160	RH2		
Bw	BRACING - SIDE WALL	DIAPHRAGM			
Be	BRACING - END WALL	DIAPHRAGM			
Br	BRACING - ROOF	DIAPHRAGM			
LB1	BRACE - LATERAL FLY	95 x 0.6 STRAP	LB1		
F1	FASCIA	0.75 FB			
P1	PURLINS	TS6175 @ 1250	BL1		
G1	GIRTS - SIDE	TS6175 @ 1380	BL1		
G2	GIRTS - END	TS6175 @ 1380	BL1		

GENERAL

- THIS IS A STANDARDISED DESIGN SUITABLE FOR LIGHT INDUSTRIAL, COMMERCIAL & RURAL BUILDINGS TO STANDARDS & REQUIREMENTS PROVIDED BY RANBUILD.
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH RANBUILD ASSEMBLY GUIDE.
- ANY DISCREPANCY SHALL BE REFERED TO THE ENGINEER BEFORE PROCEEDING WITH WORK.
- ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH RELEVANT & CURRENT SAA CODES & WITH BY-LAWS & ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
- ALL DIMENSIONS SHOWN SHOULD BE VERIFIED BY THE BUILDER ON SITE. ENGINEERS DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION & NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS & EXCAVATIONS STABLE AT ALL TIMES.
- UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES & ALL DIMENSIONS ARE IN MILLIMETRES.
- THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT SAA CODES & NORMAL ENGINEERING PRACTICE.
- ARCHITECTURAL ELEMENTS TO HAVE A MINIMUM OF 20mm CLEARANCE OF THE STRUCTURE & ARE TO BE ARTICULATED.
- IT IS COMMON SENSE TO WORK SAFELY AND TO PROTECT YOURSELF AND OTHERS FROM ACCIDENTS ON SITE. TO DO THIS, YOU MUST ENSURE YOU HAVE IN PLACE SAFE WORK PRACTICES AND APPROPRIATE EQUIPMENT. SAFETY INVOLVES PERSONAL PROTECTION OF EYES, OF SKIN(FROM SUNBURN) AND OF HEARING(FROM NOISE). FALL PROTECTION MUST ALSO BE IN PLACE AS APPLICABLE INCLUDING SAFETY MESH, PERSONAL HARNESSES AND PERIMETER GUARDRAILS. IT IS RECOMMENDED THAT YOU FAMILIARIZE YOURSELF WITH APPLICABLE LAWS, REGULATIONS, RULES, GUIDELINES, CODES OF PRACTICE AND STANDARDS AND THAT YOU ADHERE STRICTLY TO THEM.

STRUCTURAL STEEL SPECIFICATION

- ALL STRUCTURAL STEELWORK TO BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SAA CODES & SPECIFICATIONS. AS4100 STEEL STRUCTURES CODE AS/NZS 4600 COLD FORMED STEEL STRUCTURES CODE. AS1511 HIGH STRENGTH STRUCTURAL BOLTING. AS1111 COMMERCIAL BOLTS & SCREWS. AS2887 FARM STRUCTURES (WHERE APPLICABLE).
- PROPRIETARY PRODUCTS ARE TO BE IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURERS INSTRUCTIONS.

FRAME ASSEMBLY

- CORRECT FRAME ASSEMBLY IS IMPORTANT TO ACHIEVE OPTIMUM PERFORMANCE OF THE STRUCTURE
- FULLY TENSION BOLTS AT KNEE & APEX JOINTS AS SPECIFIED BEFORE STANDING FRAMES.
- FULLY TENSION BOLTS AT BASE CONNECTIONS AS SPECIFIED IMMEDIATELY AFTER STANDING THE FRAME.
- ROOF & WALL BRACING PROVIDE STRUCTURAL STABILITY WHERE SPECIFIED & MUST BE INSTALLED BEFORE THE CLADDING.

SELF DRILLING SCREWS

- QUALITY AND MECHANICAL PROPERTIES OF STRUCTURAL SCREWS MUST COMPLY WITH AS3566.1.
- ALL TEK SCREWS SHALL BE NO. 12 - 14 X 20 U.N.O
- THE MINIMUM DISTANCE OF EDGE/END SCREWS MUST HAVE AN EDGE DISTANCE OF 1.5 X SCREW DIAMETER FROM THE EDGE.
- THE MINIMUM DISTANCE OF SCREW TO SCREW SPACING MUST NOT BE LESS THAN 3 X SCREW DIAMETER BETWEEN ANY SCREWS.

HIGH TENSILE BOLTS

- ALL BOLTS SHALL BE M16 / 8.8 / S U.N.O
- CONNECTIONS WITH 8.8S BOLTS SPECIFIED ARE DESIGNED AS FRICTION TYPE JOINTS & BOLTS, NUTS & WASHERS SHALL COMPLY WITH THE RELEVANT REQUIREMENTS OF AS1252.
- 8.8/S BOLTS TO BE INSTALLED IN ACCORDANCE WITH AS1511 & TENSIONED BY AN APPROVED METHOD TO PRODUCE THE FOLLOWING SHANK TENSIONS

BOLT SIZE	SHANK TENSION (kN)
M12	50
M16	90

- FOR THIS DESIGN AN ACCEPTABLE TENSIONING METHOD IS SNUG TIGHT (PODGER SPANNER TIGHT) PLUS HALF A TURN.

CLADDING

- ALL ROOF AND WALL CLADDING TO BE INSTALLED IN ACCORDANCE WITH AS1562.1 AND THE MANUFACTURER'S INSTRUCTIONS.
- ROOF AND WALL CLADDING ARE STRUCTURAL DIAPHRAGM BRACINGS. UNDER NO CIRCUMSTANCES SHOULD THE CLADDING BE REMOVED WITHOUT WRITTEN APPROVAL FROM A PRACTICING STRUCTURAL ENGINEER.

DESIGN LOADING

- THE STRUCTURAL COMPONENTS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR THE FOLLOWING LOAD CONDITIONS COMPLYING WITH RELEVANT AUSTRALIAN STANDARDS INCLUDING AS/NZS 1170.2:2021:-

ROOF DEAD LOAD	SELF WEIGHT ONLY
ROOF LIVE LOAD	(1.8/A+0.12) BUT NOT LESS THAN 0.25kPa AND 1.1kN
WIND LOAD REGION	A0
TERRAIN CATEGORY	2
IMPORTANCE LEVEL	2
Ms	1.0
Mt	1.0
INTERNAL PRESSURE COEFFICIENTS	Cpi = -0.65 or +0.7 (OPEN)
SITE CLASS	M (CLAY)
GROUND SNOW LOAD Sg	0.5 kPa
COASTAL DISTANCE	N/A

- ALL DOORS AND WINDOWS SHALL HAVE THE SAME CYCLONIC WIND LOAD RATING AS THE REST OF THE BUILDING ENVELOPE, INCLUDING RESISTANCE TO FLYING DEBRIS AS SPECIFIED IN AS1170.2:2021 AND AS/NZS 4505-2012. DOORS AND WINDOWS SHALL BE CLOSED DURING STORMS. DOORS SHALL BE INSTALLED WITH WIND LOCKS IN CYCLONIC AREAS. SUPPORTING DOCUMENTATION INCLUDING TEST REPORTS SHALL BE AVAILABLE FROM DOORS AND WINDOWS MANUFACTURERS TO CONFIRM LOAD RATING AND ENSURE COMPLIANCE WITH ABOVE MENTIONED STANDARDS AND BCA. DOORS ARE ALSO REQUIRED TO BE SUPPLIED WITH A STICKER THAT SHOWS A RANGE OF INFORMATION INCLUDING THE DESIGN PRESSURE OF THE DOOR ACCORDING TO AS/NZS 4505-2012 REQUIREMENTS.

COPYRIGHT NOTE

- THIS DRAWING REMAINS THE INTELLECTUAL PROPERTY OF RANBUILD, AND MUST NOT BE REPRODUCED, COPIED OR MODIFIED WHOLLY OR IN PART WITHOUT THE WRITTEN PERMISSION OF LYSAGHT BUILDING SOLUTIONS PTY LTD trading as RANBUILD

DRAWING SCHEDULE

- ENG1/1-431790 STEEL FRAME SCHEDULE, NOTES & COVER PAGE
- ENG2/1-431790 STEEL FRAME DIAGRAM
- ENG3/1-431790 CONNECTION DETAILS
- ENG3/2-431790 CONNECTION DETAILS
- ENG4/1-431790 RC SLAB PLAN
- ENG5/1-431790 ISOLATED PAD FOOTING DETAILS
- ENG6/1-431790 RC SLAB DETAILS, CONCRETE SPECIFICATION, SITE NOTES
- 431790-GA GENERAL ARRANGEMENT



Copyright 2024
Lysaght Building
Solutions Pty Ltd
trading as RANBUILD

ACCREDITED PRACTITIONER
Alexander Filonov
MIEAust, CPEng, NPER
Level 1, 12 Beaumont St Hamilton NSW 2303
+61 2 4962 4311
26/06/2024

CLIENT
Amber Blundell

SITE
77 Mayne St
GULGONG NSW 2852

BUILDING TYPE
Deluxe

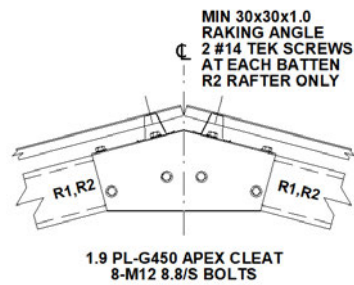
BUILDING DIMENSION
6800S x 2600E x 9000L

TITLE
STEEL FRAME SCHEDULE,
NOTES & COVER PAGE

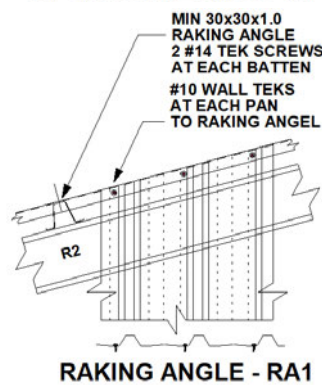
DRAWING NUMBER
ENG1/1-431790

FOR BUILDING PERMIT STAGE

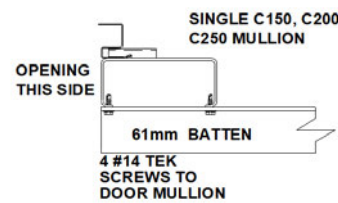
DRAWN RDS	REV A	SCALE NTS A3	PAGE 1/8
--------------	----------	--------------------	-------------



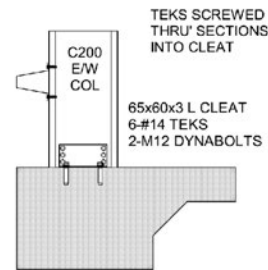
APEX CONNECTION - AP1



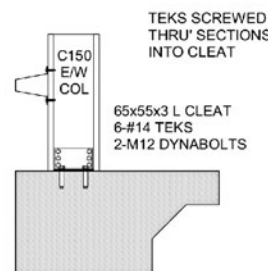
RAKING ANGLE - RA1



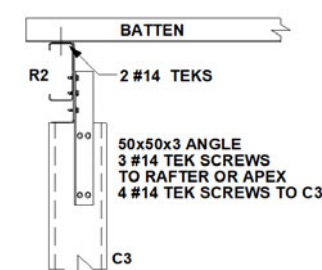
RD MULLION - DM1



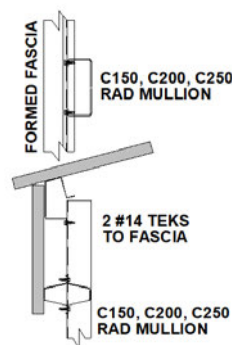
E/W COLUMN BASE - EB2



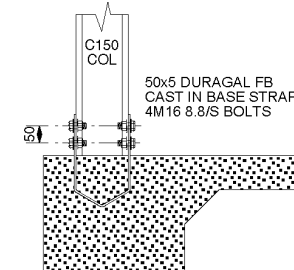
E/W COLUMN BASE - EB1



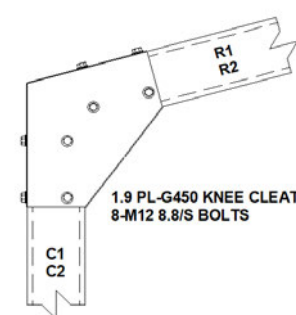
E/W COLUMN TO RAFTER CONNECTION - ER1



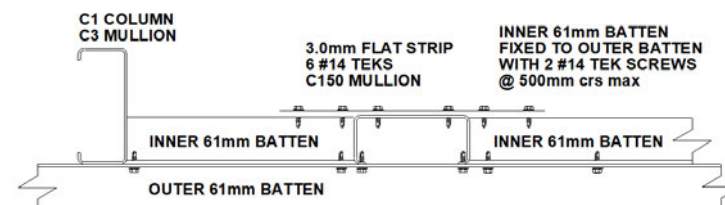
RD MULLION CAP - MC2



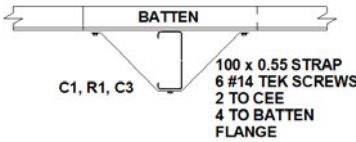
FIXED BASE - FB1



KNEE CONNECTION - KN1

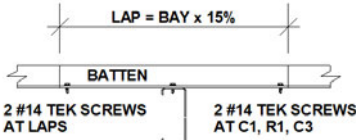


RD HEAD - RH2



IF C1, R1 LESS 1.5 BMT
USE 4 #14 SCREWS TO C1, R1, C3

LATERAL BRACE - LB1



FOR BATTEN SPAN < 2600
MINIMUM LAP = 60

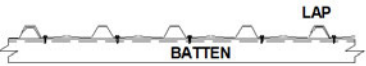
NOTE: IF C1, R1 OR C3 LESS
THAN 1.5 BMT, USE 4 #14 TEKS
TO C1, R1 OR C3

BATTEN LAP - BL1



HI PROFILE - CREST FIXED (ALL SUPPORTS)
NON-CYCLONIC 0.35 BMT (MIN), #12-14x45 TEKS
CYCLONIC 0.42 BMT (MIN), #14-10x50 TEKS

ROOF CLADDING
SHEAR DIAPHRAGM - RC1



HI PROFILE - PAN FIXED (ALL SUPPORTS)
NON-CYCLONIC 0.35 BMT (MIN), #10-16x16 TEKS
CYCLONIC 0.35 BMT (MIN), #14-10x25 TEKS

WALL CLADDING
SHEAR DIAPHRAGM - WC1



Copyright 2024
Lysaght Building
Solutions Pty Ltd
trading as RANBUILD

ACCREDITED PRACTITIONER
Alexander Filonov
MIEAust, CPEng, NPER
Level 1, 12 Beaumont St Hamilton NSW 2303
+61 2 4962 4311
26/06/2024

CLIENT
Amber Blundell

SITE
77 Mayne St
GULGONG NSW 2852

BUILDING TYPE
Deluxe

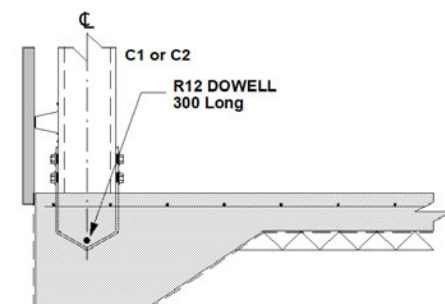
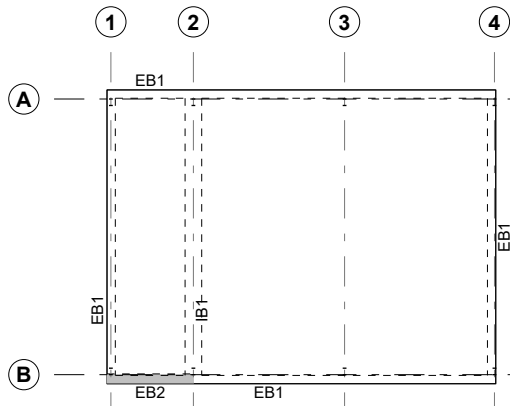
BUILDING DIMENSION
6800S x 2600E x 9000L

TITLE
CONNECTION DETAILS

DRAWING NUMBER
ENG3/2-431790

FOR BUILDING PERMIT STAGE

DRAWN RDS	REV A	SCALE 1:20 A3	PAGE 4/8
--------------	----------	---------------------	-------------



TYP CAST IN STRAP

RC SLAB

THIS GENERAL PURPOSE RC FLOOR DESIGN IS SUITABLE FOR STRUCTURES USED FOR DOMESTIC, FARM AND COMMERCIAL NON-HABITABLE BUILDINGS SUCH AS GARAGES, STORAGE SHEDS, BARNs, STABLES ETC. THE DESIGN IS NOT SUITABLE FOR STRUCTURES CONVERTED FOR USE AS A DWELLING.

ALL DIMENSIONS SHOULD BE CHECKED AND VERIFIED PRIOR TO COMMENCEMENT OF ANY WORKS.

IF SLIDING DOORS ARE INCLUDED ON THIS PROJECT, A STRIP FOOTING OR PAD FOOTINGS WILL BE NECESSARY, AND MUST BE POURED IN CONJUNCTION WITH THIS GARAGE'S SLAB OR FOOTINGS.

SEE ERECTION INSTRUCTIONS FOR ADDITIONAL NOTES.

REFERENCE

- SEE SLAB DETAIL DRAWING FOR:-
- SITE FOUNDATION CLASSIFICATION NOTES
 - MINIMUM SITE PREPARATION NOTES
 - CONCRETE SPECIFICATION NOTES
 - CONCRETE REINFORCEMENT NOTES
 - SLAB ON GRADE NOTES
 - DETAIL S1/EB1 - SLAB EDGE TYPE 1
 - DETAIL S1/EB2 - SLAB EDGE TYPE 2
 - DETAIL S1/IB1 - INTERNAL BEAM TYPE 1
 - DETAIL S1/A - SLAB CONTROL JOINT
 - DETAIL S1/C - SLAB CONSTRUCTION JOINT



Copyright 2024
Lysaght Building
Solutions Pty Ltd
trading as RANBUILD

ACCREDITED PRACTITIONER
Alexander Filonov
MIEAust, CPEng, NPER
Level 1, 12 Beaumont St Hamilton NSW 2303
+61 2 4962 4311
26/06/2024

CLIENT
Amber Blundell

SITE
77 Mayne St
GULGONG NSW 2852

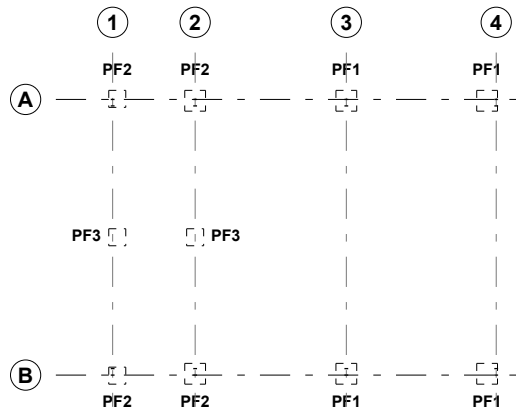
BUILDING TYPE
Deluxe
BUILDING DIMENSION
6800S x 2600E x 9000L

TITLE
RC SLAB PLAN

DRAWING NUMBER
ENG4/1-431790

FOR BUILDING PERMIT STAGE

DRAWN	REV	SCALE	PAGE
RDS	A	1:40, 1:175 A3	5/8



ISOLATED PAD FOOTING LEGEND

PF1 = 500x500x500
PF2 = 400x400x400
PF3 = 400x400x400

ISOLATED PAD FOOTINGS

ISOLATED MASS CONCRETE FOOTINGS ARE ECONOMICALLY SUITED FOR SHEDS ON SANDY GROUND.

- THIS DESIGN MAY ALSO BE USED FOR CLAYEY SOIL OR WHERE ROCK IS ENCOUNTERED.
- ALL PAD FOOTINGS TO BE FOUNDED IN NATURAL GROUND WITH A SAFE BEARING CAPACITY OF 100 kPa AT DEPTH INDICATED.

THE DEPTH "D" MAY BE REDUCED TO A MINIMUM OF 400mm PROVIDED THAT "W" DIMENSIONS ARE ADJUSTED TO MAINTAIN THE SAME VOLUME OF CONCRETE.

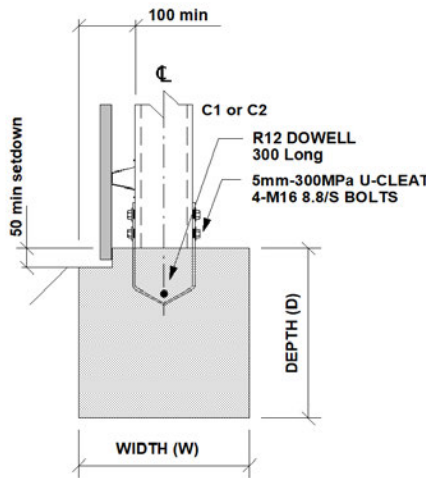
CAREFUL PLANNING SHOULD BE MADE WHEN DETERMINING PAD FOOTING SIZES. IF AN ANNEXE OR AWNING IS BEING CONSIDERED AS A FUTURE ADD-ON, INITIAL FOOTING TREATMENT MUST BE MADE. PLEASE CONTACT RANBUILD FOR THIS TREATMENT DETAIL. ALL DIMENSIONS SHOULD BE CHECKED AND VERIFIED PRIOR TO COMMENCEMENT OF ANY WORKS.

THIS DRAWING FOR ISOLATED PAD FOOTINGS IS INSUFFICIENT WHEN SLIDING DOORS ARE SPECIFIED. ADDITIONAL STRIP FOOTING UNDER SLIDING DOOR SHALL BE DESIGNED.

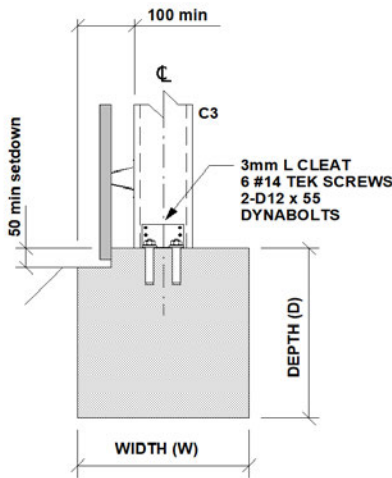
SEE ERECTION INSTRUCTIONS FOR ADDITIONAL NOTES.

REFERENCE

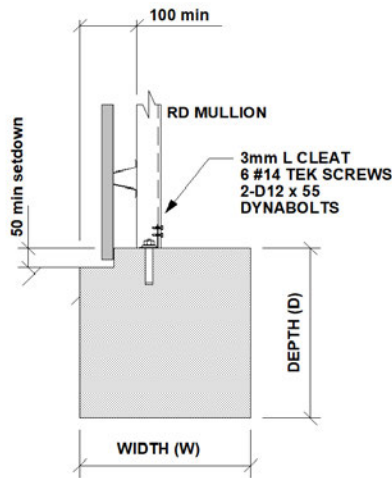
- REFER TO THE FOLLOWING NOTES:-
- SITE FOUNDATION CLASSIFICATION NOTES
 - MINIMUM SITE PREPARATION NOTES
 - CONCRETE SPECIFICATION NOTES
 - CONCRETE REINFORCEMENT NOTES



TYP DETs PF1,PF2



TYP DET PF3



TYP DET PF3 (RD mullion)



Copyright 2024
Lysaght Building
Solutions Pty Ltd
trading as RANBUILD

ACCREDITED PRACTITIONER
Alexander Filonov
MIEAust, CPEng, NPER
Level 1, 12 Beaumont St Hamilton NSW 2303
+61 2 4962 4311
26/06/2024

CLIENT
Amber Blundell

SITE
77 Mayne St
GULGONG NSW 2852

BUILDING TYPE
Deluxe

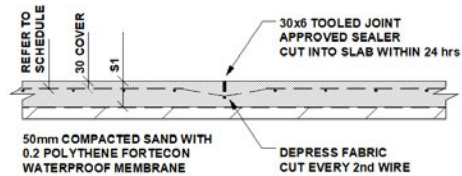
BUILDING DIMENSION
6800S x 2600E x 9000L

TITLE
ISOLATED PAD FOOTING
DETAILS

DRAWING NUMBER
ENG5/1-431790

FOR BUILDING PERMIT STAGE

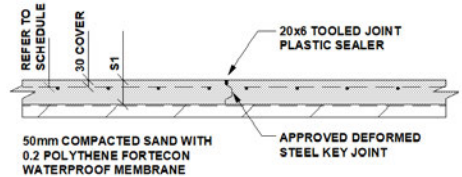
DRAWN RDS	REV A	SCALE 1:40, 1:175 A3	PAGE 6/8
--------------	----------	----------------------------	-------------



DET S1/A

CONTROL JOINT

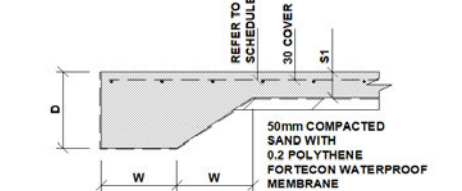
CONTROL JOINTS MUST BE SUPPLIED AT NOT GREATER THAN 4.5M OR CONCRETE POUR AT A RATIO OF NOT MORE THAN 1:1.2 IN ANY DIRECTION.



DET S1/C

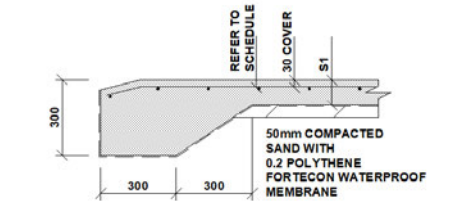
CONSTRUCTION JOINT

CONSTRUCTION JOINTS MUST BE SUPPLIED WHERE AN UNBROKEN RUN OF CONCRETE POUR EXCEEDS 30M IN ANY DIRECTION.



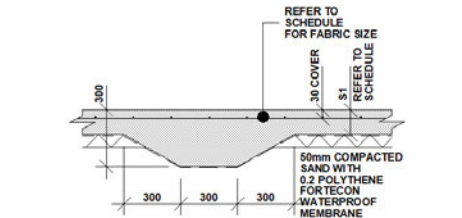
DET S1/EB1 FOR RC SLAB

NOT SUITABLE AT OPENINGS
SUBJECT TO VEHICLE TRAFFIC



DET S1/EB2

REQUIRED AT OPENINGS
SUBJECT TO VEHICLE TRAFFIC



DET S1/IB1

SITE FOUNDATION CLASSIFICATION

TWO COMMON FOUNDATION CONDITIONS & SITE CLASSIFICATIONS IN ACCORDANCE WITH AS2870 ARE USED FOR THE STANDARDISED FOOTING DESIGNS AS FOLLOWS:-

- STIFF CLAY CONFORMING TO AS2870 CLASS M.
MINIMUM SAFE BEARING CAPACITY - 100 kPa.
SHAFT ADHESION - 20 kPa
- DENSE SAND CONFORMING TO AS2870 CLASS A/S.
MINIMUM SAFE BEARING CAPACITY - 100 kPa.
- A SITE SPECIFIC GEOTECHNICAL INVESTIGATION IS RECOMMENDED & IF CONDITIONS OTHER THAN ASSUMED ARE ENCOUNTERED A DIFFERENT FOOTING DESIGN MAY BE REQUIRED & SHOULD BE REFERRED TO A QUALIFIED LOCAL ENGINEER.
- ALL FOOTINGS TO BE FOUNDED IN NATURAL GROUND.
- NO FOOTING TO BE FOUNDED ON FILL MATERIAL.
- REFERENCE SHOULD BE MADE TO CSIRO PUBLICATION 10.91 GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE & FOOTING PERFORMANCE

MINIMUM SITE PREPARATION

- STRIP SITE OF ALL TOP SOIL & DISCARD TO SPOIL. THE EXPOSED SURFACE TO BE PROOF ROLLED & AREAS REMAINING SOFT OR SPONGY ARE TO BE EXCAVATED TO SPOIL.
- PLACE APPROVED GRANULAR FILL MATERIAL TO THE REQUIRED BUILDING PLATFORM LEVEL IN LAYERS NOT EXCEEDING 200mm AND COMPACT BY ROLLING WITH SUITABLE EQUIPMENT TO ACHIEVE A DRY DENSITY RATIO OF 98% STANDARD COMPACTION TO AS1289 - E1.1 AT OPTIMUM MOISTURE CONTENT. THE TOP 200mm TO BE COMPACTED TO 100% STANDARD DRY DENSITY.
- THE COMPACTION OF ALL FILL MATERIAL TO BE INSPECTED AND APPROVED BY A RESPONSIBLE GEOTECHNICAL CONSULTANT.

CONCRETE REINFORCEMENT

- REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY & NOT NECESSARILY IN TRUE PROJECTION.

- REINFORCEMENT NOTATION:-

N DENOTES HOT ROLLED DEFORMED BAR.

SL DENOTES HARD DRAWN WELDED WIRE FABRIC. THE NUMBER IMMEDIATELY FOLLOWING BAR NOTATION IS THE NOMINAL DIAMETER IN mm.

- PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING COVER TO ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FOOTINGS 80 BOTTOM, 65 TOP & SIDES
SLABS 30 BOTTOM, 20 TOP
BEAMS 40 BOTTOM & SIDES TO STIRRUPS. TOP COVER AS DETAILED

- PROVIDE 2N12 DIAGONAL CORNER BARS 900 LONG AT ALL RE-ENTRANT CORNERS OF OPENINGS IN SLABS AND THESE BARS TO BE POSITIONED 30mm FROM THE CORNER.

CONCRETE SPECIFICATION

- CARRY OUT ALL WORK IN ACCORDANCE WITH THE CURRENT ISSUE OF AS3600 & THE SPECIFICATION.
- CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH & MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEERS APPROVAL. DEPTH OF BEAMS INCLUDE SLAB THICKNESS.
- SLABS & BEAMS ARE TO BE POURED TOGETHER.
- CONSOLIDATE BY VIBRATION.
- SLAB CONCRETE TO BE AS SHOWN IN SLAB ON GRADE CRITERIA.
- BORED PIER CONCRETE SHALL HAVE $F_c = 20$ MPa, MAXIMUM AGGREGATE SIZE = 20 mm, SLUMP = 100 mm, EXCEPT FOR BCA CLASSES 2 TO 9 BUILDINGS CONCRETE SHALL HAVE $F_c = 32$ MPa.

SLABS ON GRADE

- SLABS TO BE PLACED OVER 25 CONSOLIDATED SAND OVER PREPARED SUBGRADE.
- PROVIDE 0.2 POLYTHENE FORTICON WATERPROOF MEMBRANE UNDER ALL SLABS WITH LAPPED & TAPED JOINTS.
- PLACE PUMP MIX CONCRETE AS SPECIFIED BELOW TO ACCURATE LEVELS AS PER ARCHITECTS SPECIFICATION.
- PROVIDE CONTROL JOINTS AS INDICATED BY NEATLY SAW CUTTING 40 x 6 GROOVES WITHIN 12 HOURS OF THE FINAL FLOAT OF THE CONCRETE.
- CURE SLAB FOR 7 DAYS AFTER PLACEMENT BY MAINTAINING A CONTINUOUSLY WET SURFACE BY APPROVED METHODS. FLOODING & COVERING WITH POLYTHENE IMMEDIATELY AFTER FINISHING IS AN APPROVED METHOD.
- SEALING OF JOINTS TO BE CARRIED OUT ONE MONTH MINIMUM AFTER CURING IS COMPLETE.
- PROVIDE PROPER STORMWATER DRAINAGE AWAY FROM THE BUILDING.

SLAB ON GRADE CRITERIA	
CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (MPa)	20
FLEXURAL STRENGTH AT 90 DAYS (MPa)	5
SLUMP (mm)	100
AGGREGATE MAXIMUM SIZE (MM)	20
CEMENT TYPE	SL
CEMENT CONTENT (kg/cubic metre) MIN	320
FLY ASH CONTENT (kg/cubic metre) MAX	70
WATER / CEMENT RATIO (MAX)	0.45
MICROSTRAIN AT 56 DAYS	600
FLOOR FINISH - BURNISHED STEEL TROWEL	NON SLIP
FLOOR TOLERANCE	CLASS B

- FOR OTHER LOAD CONDITIONS A DESIGN VARIATION IS REQUIRED & SHOULD BE REFERRED TO A QUALIFIED LOCAL ENGINEER.

DIMENSION SCHEDULE

D	200
W	200
S1	100RC SLAB
FABRIC	SL621 mesh

CLADDING			
ITEM	PROFILE (min)	FINISH	COLOUR
ROOF	TRIMDEK 0.42 BMT	CB	WB
WALLS	TRIMDEK 0.35 BMT	CB	WB
CORNERS	-	CB	WB
BARGE	-	CB	WB
GUTTER	SHEERLINE	CB	WB
DOWNPIPE	100x50	CB	WB

0.35bmt=0.40tct; 0.42bmt=0.47tct; 0.48bmt=0.53tct

ACCESSORY SCHEDULE & LEGEND

QTY	MARK	DESCRIPTION
1	RD1	B&D, Firmadoor, R.D, Residential "R1F", 2200 high x 1550 wide Clear Opening C/B

ARCHITECTURAL DRAWING ONLY, FOR BUILDING PERMIT STAGE

CLIENT
Amber Blundell

SITE
77 Mayne St
GULGONG NSW 2852

BUILDING
DELUXE
6800 SPAN x 2600 EAVE x 9000 LONG

ACCREDITED PRACTITIONER
Alexander Filonov
Level 1, 12 Beaumont St Hamilton NSW 2303
+61 2 4962 4311
26/06/2024

TITLE
GENERAL ARRANGEMENT

SCALE A3 SHEET 1:125	DRAWING NUMBER 431790-GA	REV A	PAGE 8/8
-------------------------	------------------------------------	-----------------	--------------------

