Goondiwindi REGIONAL COUNCIL | REGIONAL AUSTRALIA at its best!

Exemption Certificate

Section 46 of the Planning Act 2016

File reference: EC23/02
Contact name: Mrs Ronnie McMahon: PD
Contact number: (07) 4671 7400
Date: 10 February 2023

AAA Building Consultants
PO Box 464
CLERMONT QLD 4721

Attention: Chris Thurley

Dear Chris

I wish to advise that an Exemption Certificate is granted for a development comprising a 21.1m x 8m domestic storage shed, built within the allowable boundary setbacks and within the flood hazard and bushfire hazard areas, on Lot 130 on B34222, 56 Graysholme Road, Oman Ama.

1. Description of the Development to which this Certificate relates

Assessable Development under the *Goondiwindi Region Planning Scheme 2018 (Version 2)*, Part 5 Tables of Assessment	**Part 5 Reference**
"Accommodation activities" – *"Dwelling house"* (Domestic storage shed built within the allowable boundary setbacks)	Table 5.5.9 (AO2.1 of the Rural Zone Code)
"Accommodation activities" – *"Dwelling house"* (Domestic storage shed built within a flood hazard area)	Table 5.9.1 (Flood Hazard Overlay Code)
"Accommodation activities" – *"Dwelling house"* (Domestic storage shed built within a bushfire hazard area)	Table 5.9.1 (Bushfire Hazard Overlay Code)

2. Reasons for Giving Exemption Certificate

The development is exempt under this Certificate under section 46(3)(b) of the *Planning Act 2016* for the following reasons:

- The effects of the development would be minor or inconsequential, considering the circumstances under which the development was categorised as assessable development. It is considered that the proposed development will not be detrimental to the maintenance of the rural character of the zone in accordance with PO2 of the Rural Zone Code.

- It is proposed that the structure be built 0.5m from the front boundary. The application states that this is considered to be the most suitable site based on the mapped flood hazard area, as well as ease of access from the driveway off Graysholme Road.
- The proposed structure is a non-habitable shed. Given that the site is currently developed with a residential dwelling, it is considered that the development will not increase the risk to personal safety, and will not increase the potential for flood damage on-site or on other properties.
- The proposed site for the structure is within the potential impact buffer of the bushfire hazard area. The application states that the structure will be constructed from non-flammable materials and that no bulk hazardous materials will be stored. It is considered that the proposed structure will not impact upon property, environment or personal safety.

3. When Exemption Certificate Ceases to have Effect

This Exemption Certificate has effect for **two (2) years.**

4. State Periods that Must be Complied with

To the extent the development does not comply with any of the following, this Exemption Certificate has no effect:

- The use must commence by 10 February 2025.

Should you have a query or seek clarification about any of these details, please contact Council's Manager of Planning Services, Mrs Ronnie McMahon, on (07) 4671 7400.

Yours faithfully

Carl Manton
Chief Executive Officer
Goondiwindi Regional Council

enc Attachment 1—Site Plan (Lot 130 on B34222, 56 Graysholme Road, Oman Ama)

Goondiwindi REGIONAL COUNCIL

Attachment 1 – Site Plan (Lot 130 on B34222, 56 Graysholme Road, Oman Ama)

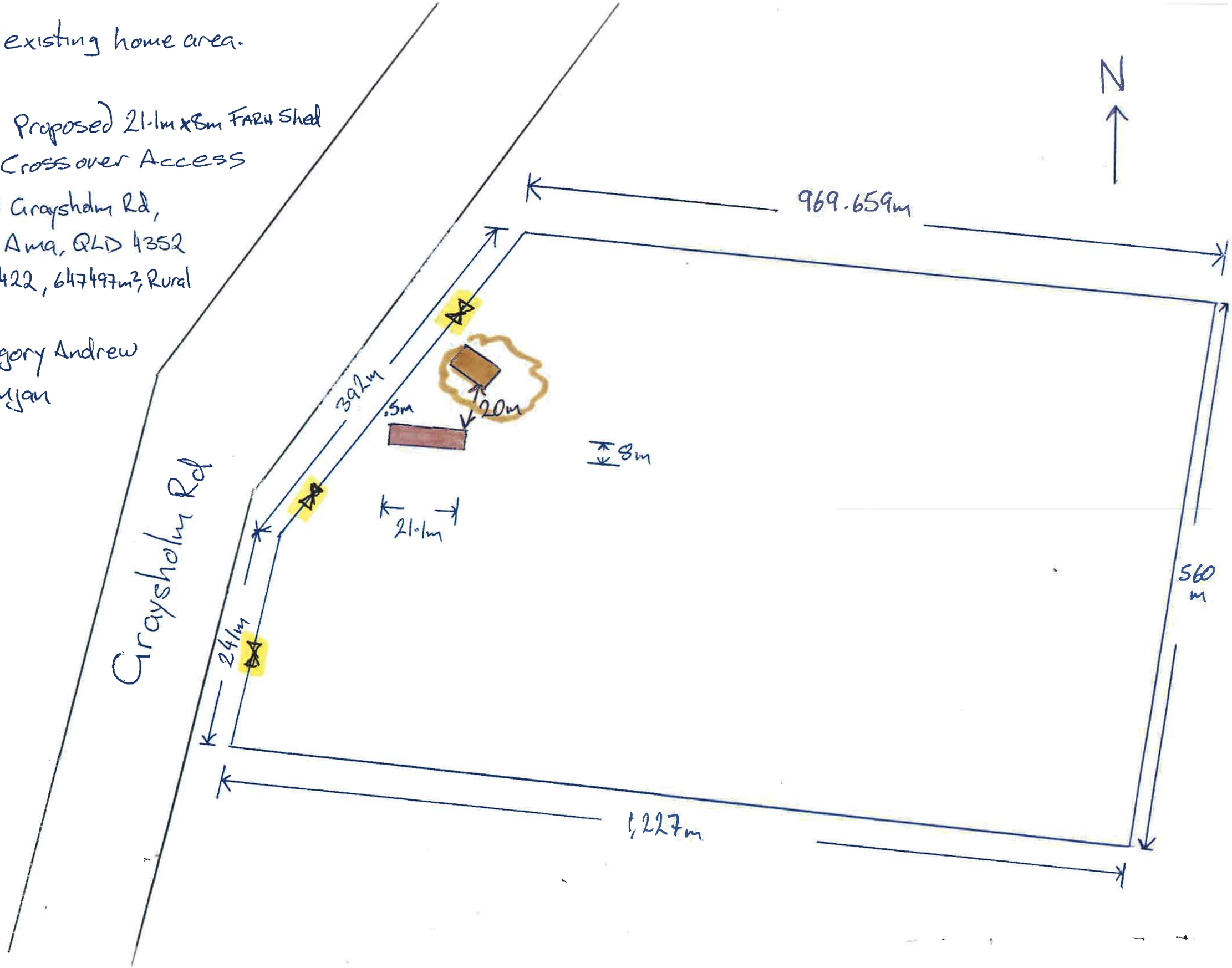
existing home area.

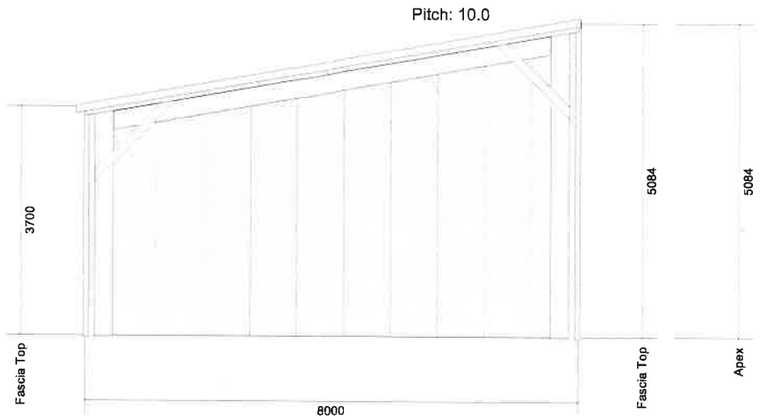
Proposed 21.1m x 8m FARM Shed

Crossover Access

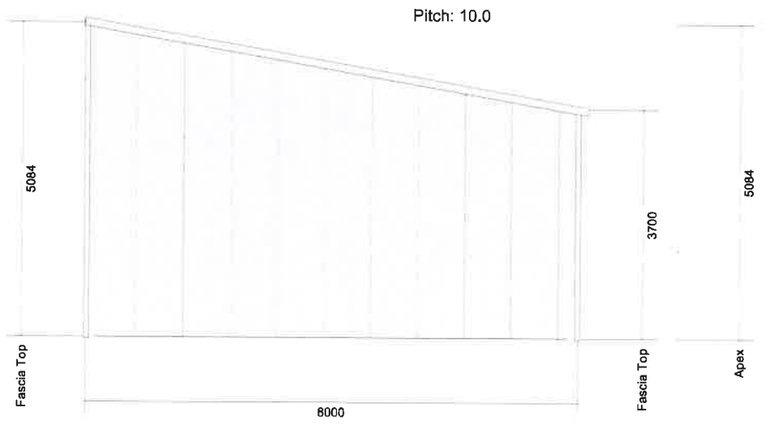
Address: 56 Grayshelm Rd,
Oman Ama, QLD 4352
Lot 130, B3422, 647497m², Rural

Owner: Gregory Andrew
Domjan





FRONT ELEVATION

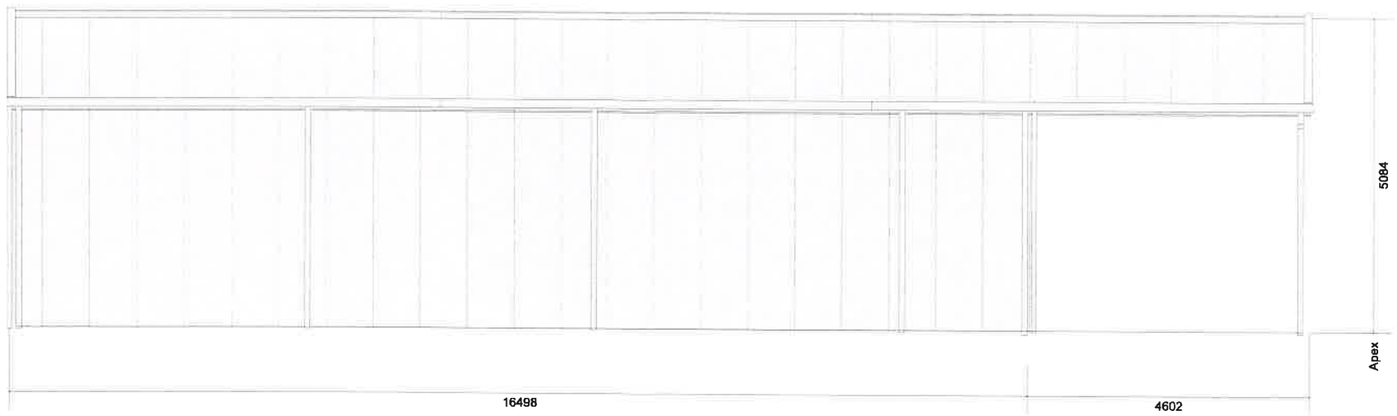


BACK ELEVATION

R&F STEEL BUILDINGS
R&F Steel Buildings Warwick
ABN: 21 146 705 893

R&F Steel Buildings Warwick
QBCC Lic. 1197750 / NSW 237076C
97a McEvoy St, Warwick QLD 4370
T (07) 46 619 835
E warwick@rfsteelbuildings.com.au

PROJECT NO: **P11472Q5**	CUSTOMER: Andrew Domjan	SITE: 56 Graysholm Rd, Oman Ama, QLD 4352	DATE: **28/11/2022**
PROJECT NAME: **Andrew Domjan**		LOT: 130 RP/SP: B34222	ULT WIND SPEED: **55.64 m/s** SERVICEABILITY: **38.07 m/s**
JOB NAME: **Andrew Domjan/Skillion Ext**		DRAWING No: **J2907-Domjan**:Elevation	



LEFT ELEVATION

RIGHT ELEVATION

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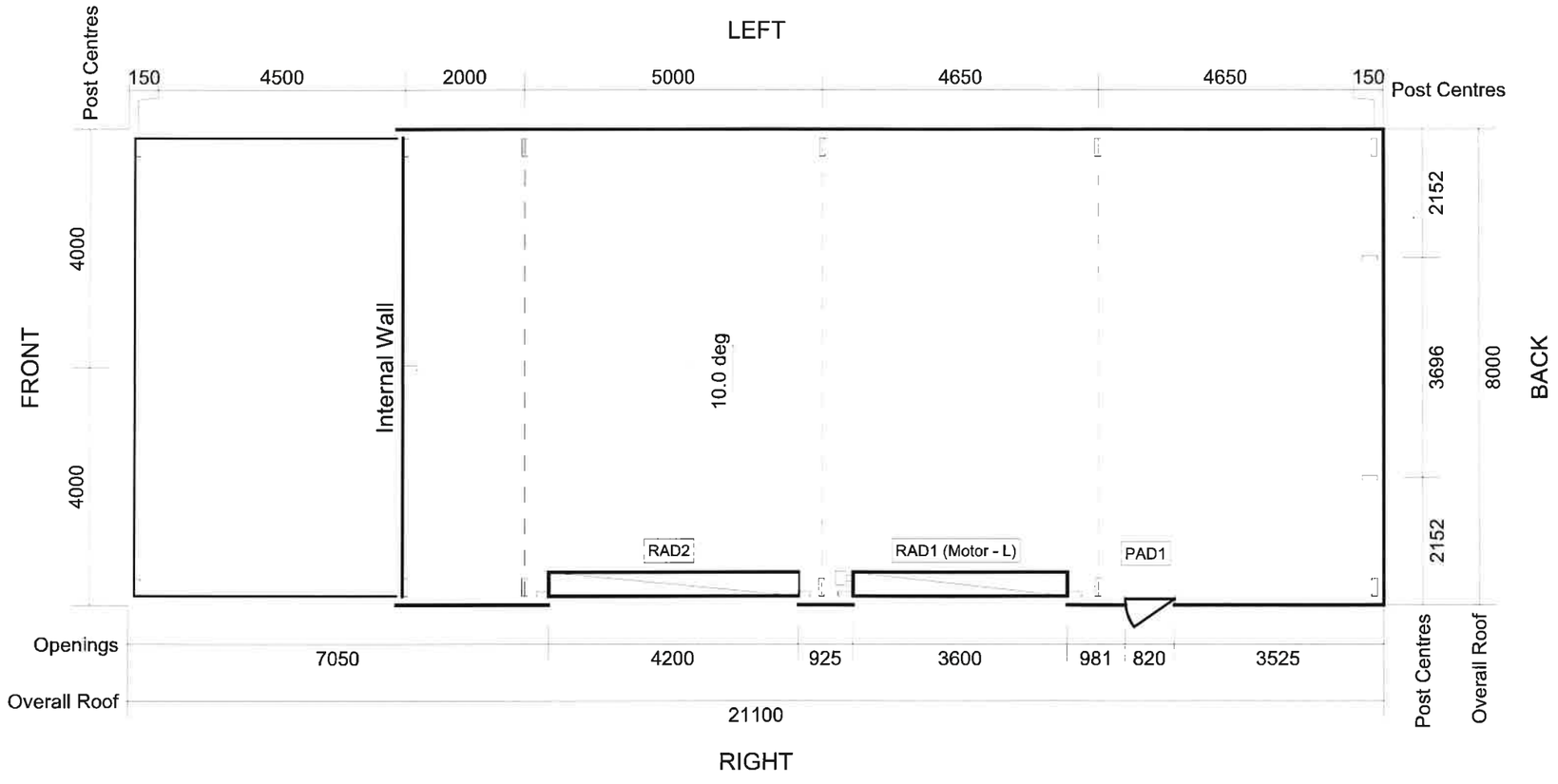
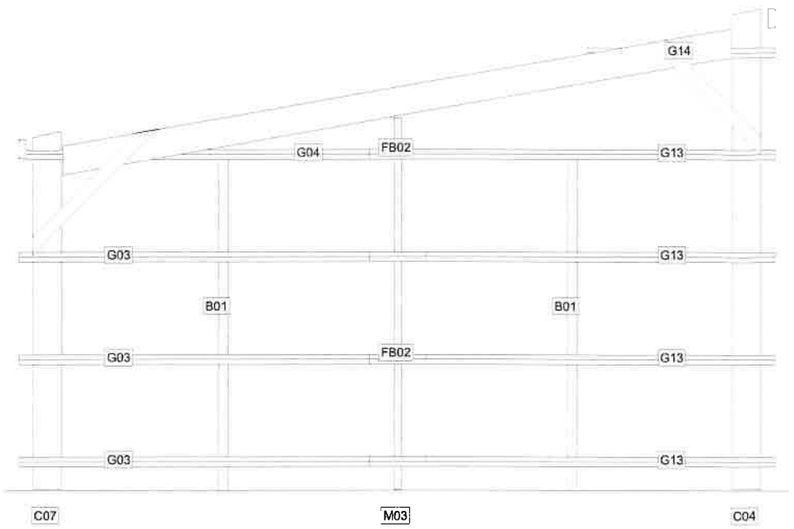
Opening Legend	
PAD1	2040h x 820w
RAD1	3000h x 3600w
RAD2	3600h x 4200w



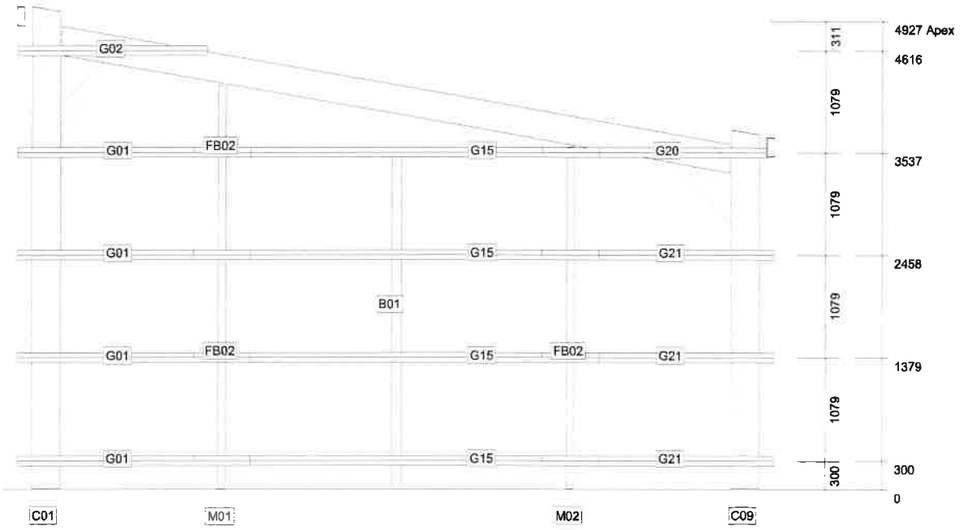
Floor Plan

R&F STEEL BUILDINGS R&F Steel Buildings Warwick ABN: 21 146 705 893	**R&F Steel Buildings Warwick** QBCC Lic. 1197750 / NSW 237076C 97a McEvoy St, Warwick QLD 4370 T (07) 46 619 835 E warwick@rfsteelbuildings.com.au	PROJECT NO: **P11472Q5** CUSTOMER: Andrew Domjan PROJECT NAME: **Andrew Domjan** JOB NAME: **Andrew Domjan/Skillion Ext**	SITE: 56 Graysholm Rd Oman Ama, QLD 4352 LOT: 130 RP/SP: B34222 DRAWING No: **J2907-Domjan**:Floor Plan	DATE: **28/11/2022** ULT WIND SPEED: **55.64 m/s** SERVICEABILITY: **38.07 m/s**

Label	Size	Qty	Length
B01	PC10012	4	3589
C01	PC30024	1	5073
C04	PC30024	1	5073
C07	PC30024	1	3769
C09	PC30024	1	3769
FB02	RNFFBC25051	5	51
G01	PZ10012	4	2452
G02	PZ10012	1	1993
G03	PZ10012	3	4300
G04	PZ10012	1	4223
G13	PZ10012	4	4300
G14	PZ10012	1	1993
G15	PZ10012	4	4296
G20	PZ10012	1	2375
G21	PZ10012	3	2452
M01	PC25024	1	4241
M02	PC25024	1	3589
M03	PC25024	1	3915



Front



Achieved Bracing	Required Bracing
45.829453 kN	24.106676 kN

Back

Wall Girt Layout

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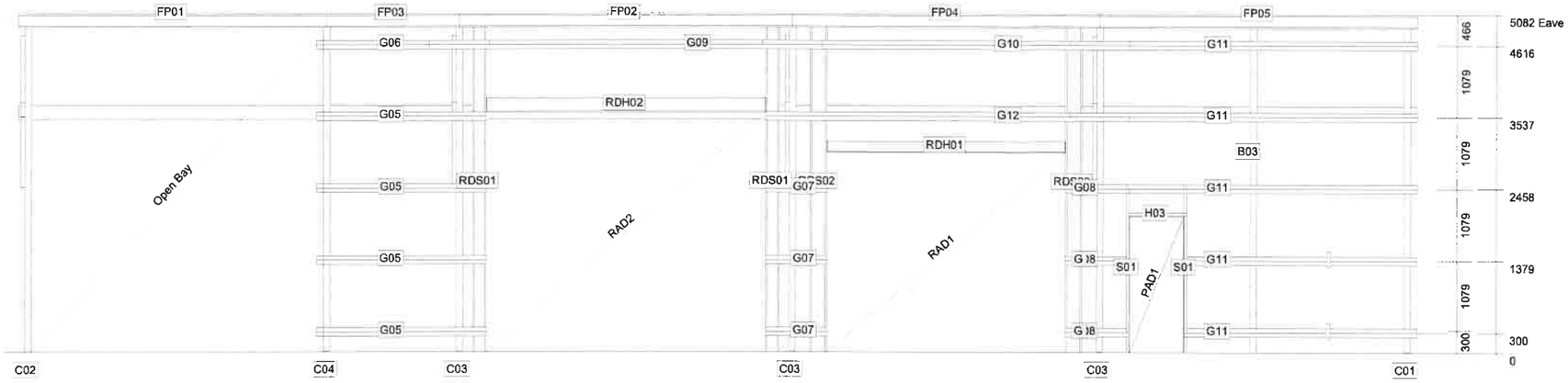
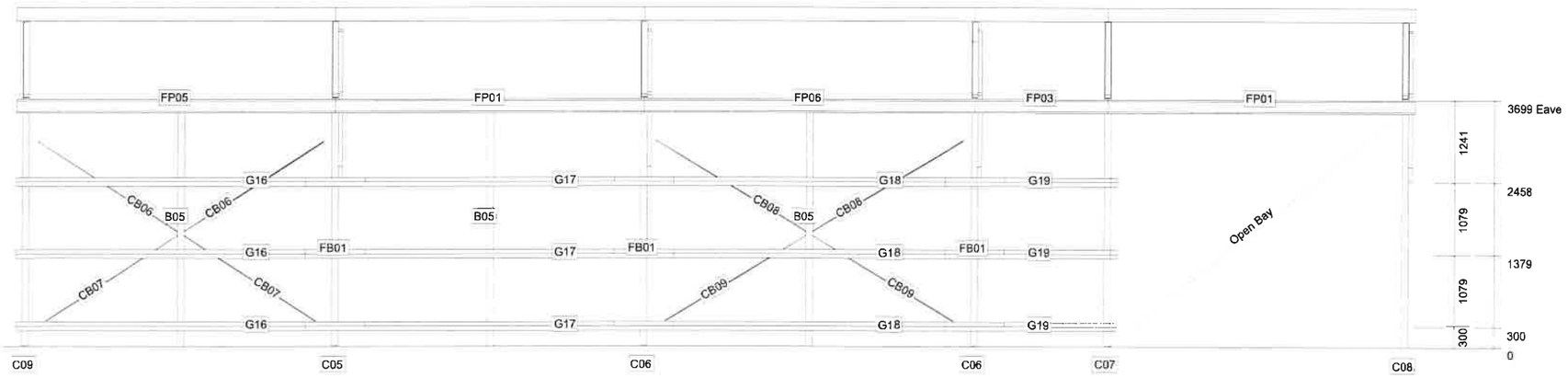


Right



Left

Wall Girt Layout

Label	Size	Qty	Length
B03	PC10012	1	5083
B05	PC10012	3	3699
C01	PC30024	1	5073
C02	PC30024	1	5108
C03	PC30024	3	5073
C04	PC30024	1	5073
C05	PC30024	1	3769
C06	PC30024	2	3769
C07	PC30024	1	3769
C08	PC30024	1	3804
C09	PC30024	1	3769
CB06	101M46Z-3012-PI	2	2554
CB07	101M46Z-3012-PI	2	2554
CB08	101M46Z-3012-PI	2	2702
CB09	101M46Z-3012-PI	2	2702
FB01	RNFFBC30063	3	64
FP01	PC20019	3	4650
FP02	PC20019	1	5000
FP03	PC20019	2	2000
FP04	PC20019	1	4650
FP05	PC20019	2	4800
FP06	PC20019	1	5000
G05	PZ15012	4	2550
G06	PZ15012	1	2600
G07	PZ15012	3	925
G08	PZ15012	3	975
G09	PZ15012	1	5900
G10	PZ15012	1	5550
G11	PZ15012	5	5250
G12	PZ15012	1	5500
G16	PZ15012	3	5250
G17	PZ15012	3	5550
G18	PZ15012	3	5900
G19	PZ15012	3	2600
H03	RNF10F130GA	1	915
RDH01	PC15015	1	3590
RDH02	PC20015	1	4190
RDS01	PC20015	2	5083
RDS02	PC25024	2	5083
S01	RNF10F130GA	2	2522
	PZ15012	8	3517

Opening Legend	
PAD1	2040h x 820w
RAD1	3000h x 3600w
RAD2	3600h x 4200w

Achieved Bracing	Required Bracing
45.829453 kN	24.106676 kN

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LOT: 130 RP/SP: B34222

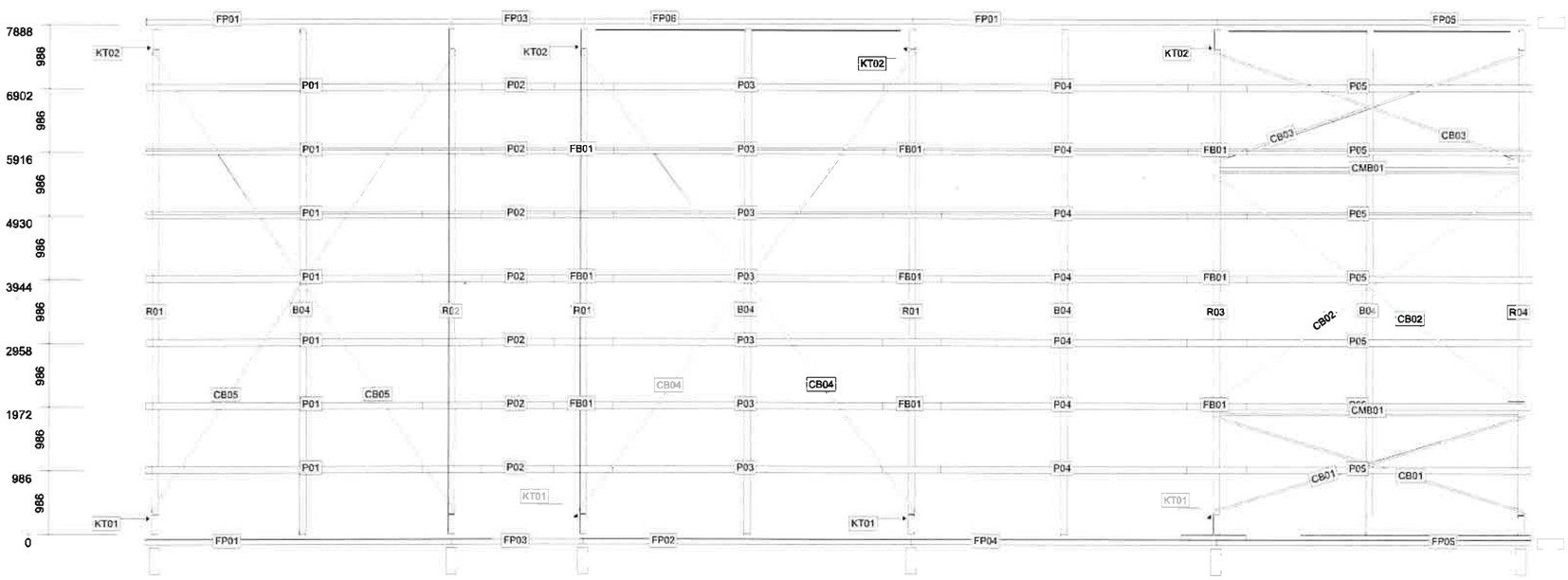
DATE: **28/11/2022**
ULT WIND SPEED: **55.64 m/s**
SERVICEABILITY: **38.07 m/s**

DRAWING No: **J2907-Domjan**:Wall Girt Layout

Label	Size	Qty	Length
B04	PC10012	4	7814
CB01	BS321201-PI	2	4968
CB02	BS321201-PI	2	5928
CB03	BS321201-PI	2	5031
CB04	BS321201-PI	2	8735
CB05	BS321201-PI	2	8453
CMB01	PC15012	2	4554
FB01	RNFFBC30063	9	64
FP01	PC20019	3	4650
FP02	PC20019	1	5000
FP03	PC20019	2	2000
FP04	PC20019	1	4650
FP05	PC20019	2	4800
FP06	PC20019	1	5000
KT01	PC15019	4	1678
KT02	PC15019	4	1884
P01	PZ15012	7	5099
P02	PZ15012	7	2900
P03	PZ15012	7	5900
P04	PZ15012	7	5549
P05	PZ15012	7	5249
R01	PC30024	3	7233
R02	PC30024	1	7233
R03	PC30024	1	7233
R04	PC30024	1	7233

FRONT

LEFT



BACK

RIGHT

Achieved Bracing	Required Bracing
39.675964 kN	17.165924 kN

Roof Purlin Plan

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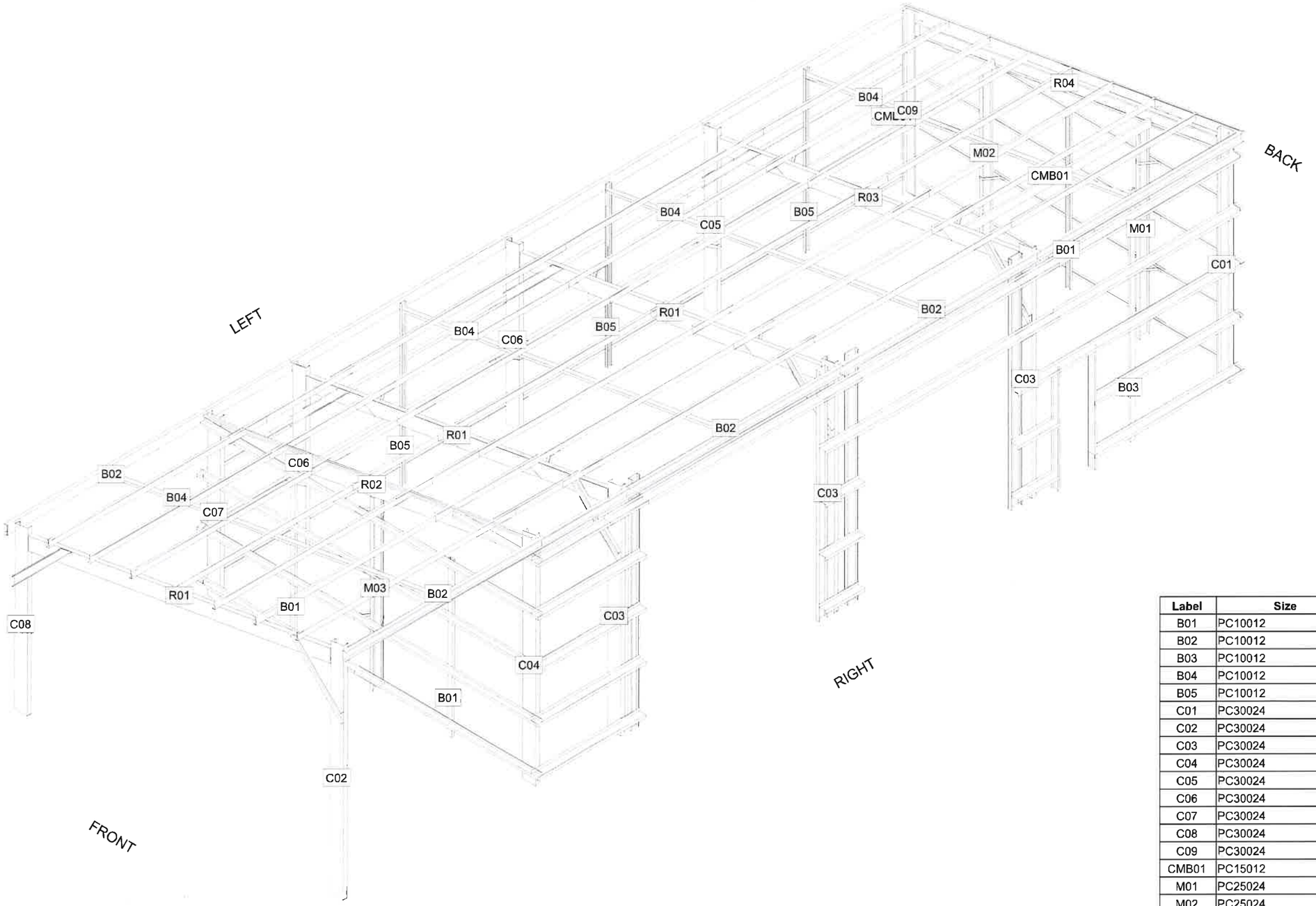
JOB NAME: **Andrew Domjan/Skillion Ext**		DRAWING No: **J2907-Domjan**:Roof Purlin Plan	

Label	Size	Qty	Length
R03	PC30024	1	7233
R04	PC30024	1	7233



Label	Size	Qty	Length
B01	PC10012	4	3589
B02	PC10012	4	203
B03	PC10012	1	5083
B04	PC10012	4	7814
B05	PC10012	3	3699
C01	PC30024	1	5073
C02	PC30024	1	5108
C03	PC30024	3	5073
C04	PC30024	1	5073
C05	PC30024	1	3769
C06	PC30024	2	3769
C07	PC30024	1	3769
C08	PC30024	1	3804
C09	PC30024	1	3769
CMB01	PC15012	2	4554
M01	PC25024	1	4241
M02	PC25024	1	3589
M03	PC25024	1	3915
R01	PC30024	3	7233
R02	PC30024	1	7233

ISO Front Right

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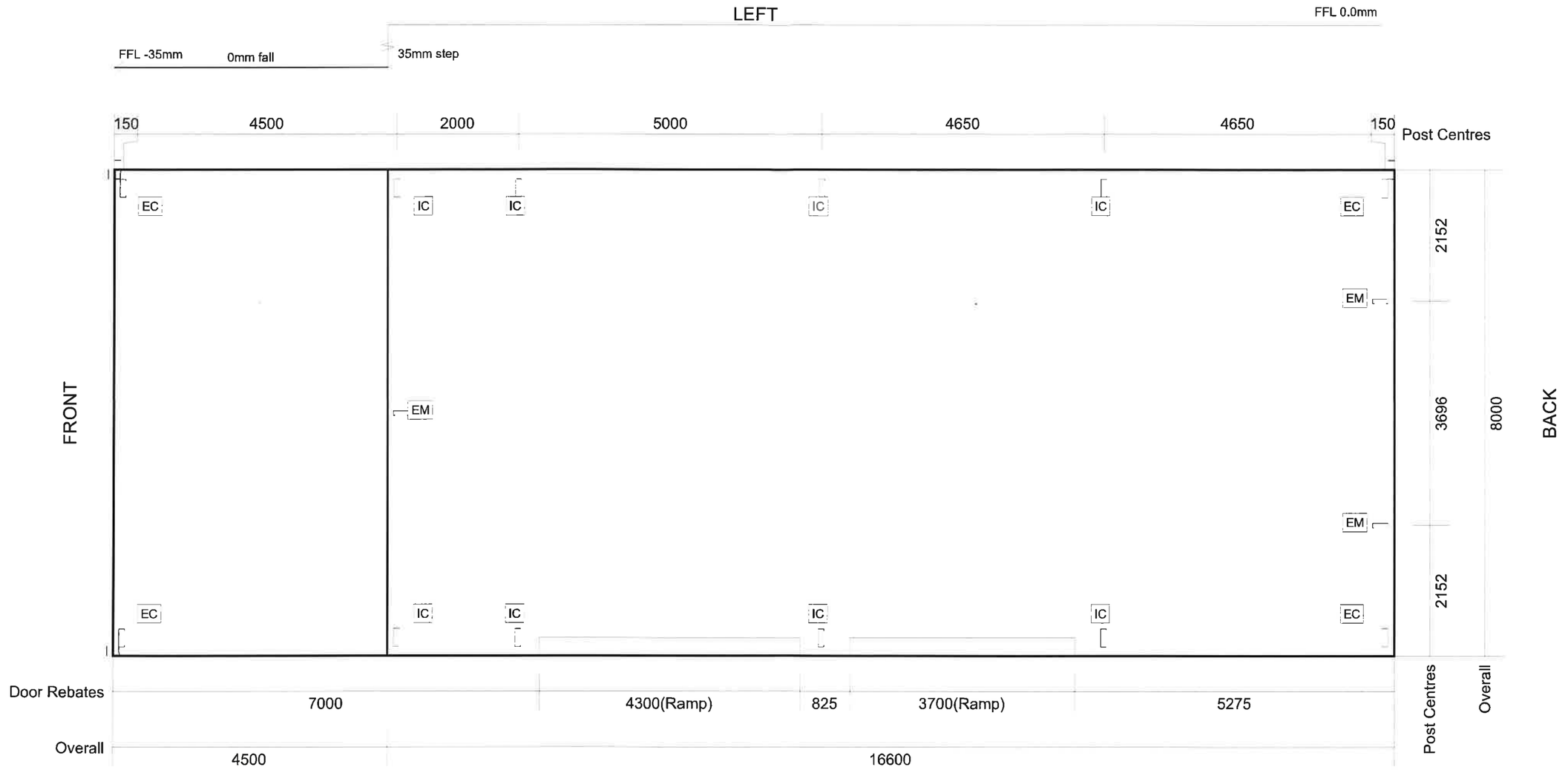
PROJECT NAME: **Andrew Domjan**
JOB NAME: **Andrew Domjan/Skillion Ext**

SITE: 56 Graysholm Rd
Oman Ama, QLD 4352
LOT: 130 RP/SP: B34222

DRAWING No: **J2907-Domjan**:ISO Plan

DATE: **28/11/2022**
ULT WIND SPEED: **55.64 m/s**
SERVICEABILITY: **38.07 m/s**



Slab / Footing Plan

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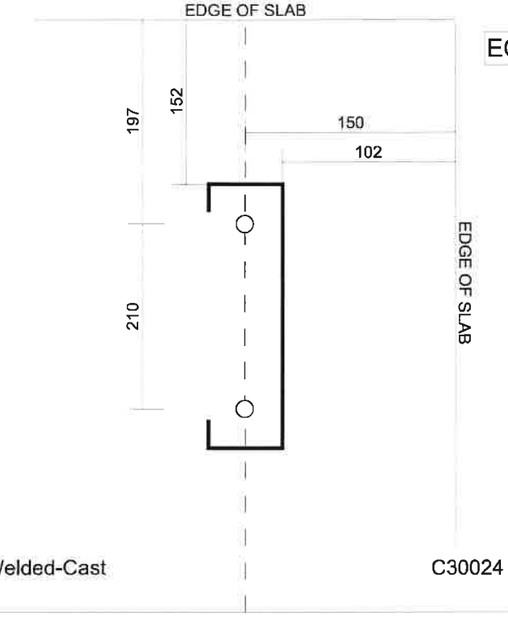
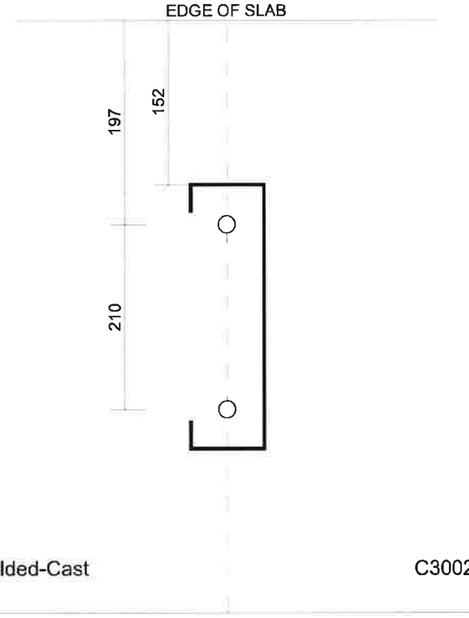
JOB NAME: **Andrew Domjan/Skillion Ext**		DRAWING No: **J2907-Domjan**:Slab/Footing Plan	

Common Column 'EC' Detail



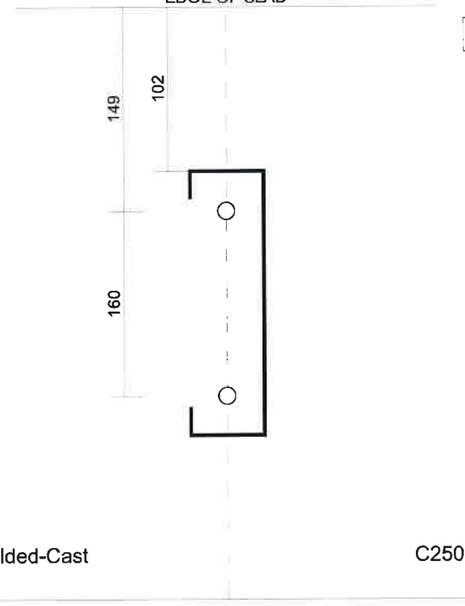
Welded-Cast C30024

Common Column 'IC' Detail



Welded-Cast C30024

Common Mullion 'EM' Detail



Welded-Cast C25024

Roller Door Ramp

Outside of Slab

Post Details

R&F Steel Buildings Warwick
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WIND SPEED CLASSIFICATIONS

REGION	PERM. STRESS WIND CLASS.	AS4055. WIND CAT.	Vp.	Vu.	R&F WIND CAT.	Cpi.	OPENINGS
A&B	W33	N2	33	40	N40	0.2,-0.3	NO DOMINANT
A&B	W33	N2	33	40	N40D	0.7,-0.65	DOMINANT
A&B	W41N	N3	41	50	N50	0.2,-0.3	NO DOMINANT
A&B	W41N	N3	41	50	N50D	0.7,-0.65	DOMINANT
A&B	W50N	N4	50	61	N61	0.2,-0.3	NO DOMINANT
A&B	W50N	N4	50	61	N61D	0.7,-0.65	DOMINANT
C&D	W41C	C1	41	50	C50	0.7,-0.65	
C&D	W50C	C2	50	61	C61	0.7,-0.65	
C&D	W60C	C3	60	73	C73	0.7,-0.65	
C&D	W70C	C4	70	85	C85	0.7,-0.65	

GENERAL NOTES

1. During construction, the structure shall be maintained in a stable condition. Construction loads must not exceed the capacity of the structure at the time of loading.
2. All workmanship & materials shall be in accordance with the relevant current SA/SNZ standards & codes of practice except where varied by the contract documents or of the by-laws of the local authority.
3. Wind loads have been assessed in accordance with AS/NZ1170.2
4. Live loading are in accordance with AS/NZ1170.1
5. Enclosed Building' Member Schedule denotes -0.3,+0.2kPa internal pressure coefficient used. 'Dominant Opening' Member Schedule denotes -0.65,+ 0.7kPa internal pressure coefficient used.
6. Certification of Design is subject to a Site Specific Design Certificate being issued by an engineer for the structure in question.
7. This plan is suitable for use as Building Class 6, 7, 8, 9a, 9b & 10a. Refer to Engineer for Class 1 (habitable dwelling) design or if internal lining is being fitted.
8. This plan is suitable for Building Importance Levels 1, 2, 3 &4
9. This plan is suitable for Terrain categories 2, 2.5, 3 & 4. Refer to Engineer for Terrain Cat 1.
10. Additional awning, carports, sheds & skillion buildings may be attached to these structure by using any standard Answer Software Engineering Plan.

NOTE :
Shed Design complies with the Stramit Areas Roof & Wall Cladding Manual dated March 2009, and Stramit Cyclonic Area Top Hat Design Supplement dated 4 September 2009.

SNOW LOADING - (Kpa)

NBR WIND CAT.	ROOF PITCH 10°	15°	20°	25+°
N40 / N40D	1.0	1.5	2.0	2.0
N50 / N50D	1.3	1.8	2.4	3.5
N61 / C50	1.5	2.2	3.2	4.0
N61D / C61	1.8	2.6	4.0	5.0

These standard drawings are suitable for the following loads. (Refer AS1170.3)

COMPLETE INUNDATION OF FLOOD WATER

NBR WIND CAT.	Mtr. Per second
N50 / N50D	1.0mtr / sec.
N61 / C50	1.25mtr / sec.
N61D / C61	1.5mtr / sec.

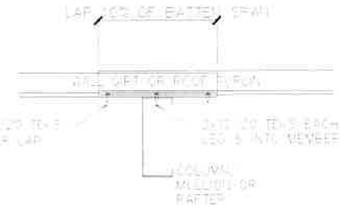
FIX 0.4 FLY BRACE WITH 2/12x20 TEKS PER FIXING POINT FOR TOP HAT PURLIN/GIRT CONNECTIONS. FIX 30x1.0 FLY BRACE WITH 2/12x20 TEKS PER FIXING POINT FOR C/Z PURLIN/GIRT CONNECTIONS.

FLY BRACE CONNECTION DETAIL

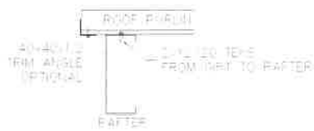
ROOF CLADDING OPTIONS.

FB' TO BE PLACED ON COLUMNS, RAFTERS & END MULLIONS. REFER TABLE FOR MAX. SPACING
FB's NOT REQUIRED ON END FRAME COLUMNS & RAFTERS.

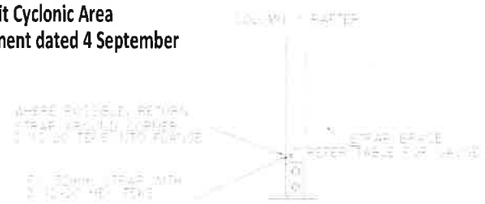
FLY BRACE LOCATIONS



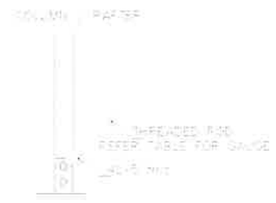
WALL GIRT/ ROOF PURLIN LAP DETAIL



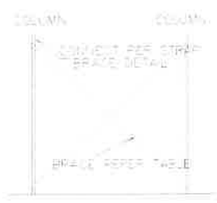
GABLE END ROOF PURLIN DETAIL



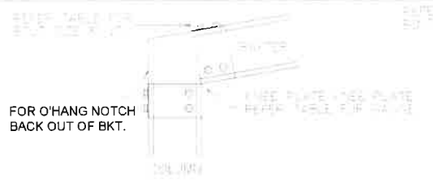
STRAP BRACE



ROD BRACE



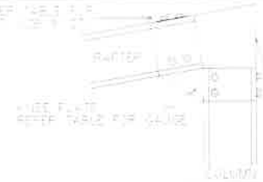
WALL BRACING SET



FOR O'HANG NOTCH BACK OUT OF BKT.

SECTION SIZE	BRACKET GAUGE	SINGLE FIXING	BACK TO BACK FIXING
C100's	1.9mm	8 x TOTAL M12 Gr4.6	12 x TOTAL M12 Gr4.6
C150's	2.4mm	8 x TOTAL M12 Gr 4.6	12 x TOTAL M12 Gr 4.6
C200's	2.4mm	8 x TOTAL M12 Gr 4.6	12 x TOTAL M12 Gr 4.6
C250's	2.4mm	12 x TOTAL M16 Gr8.8	18 x TOTAL M16 Gr 8.8
C300's	3.0 mm	12 x TOTAL M16 Gr8.8	18 x TOTAL M16 Gr 8.8
C350's	3.0mm	12 x TOTAL M16 Gr 8.8	18 x TOTAL M16 Gr 8.8

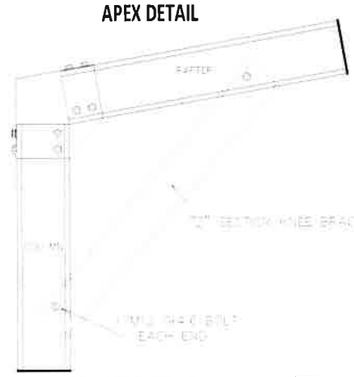
KNEE DETAIL



FOR O'HANG NOTCH BACK OUT OF BKT.

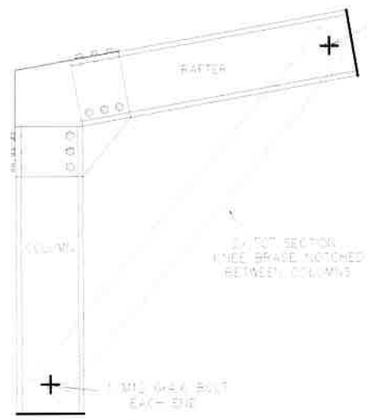
SECTION SIZE	BRACKET GAUGE	SINGLE FIXING	BACK TO BACK FIXING
C100's	1.9mm	8 x TOTAL M12 Gr4.6	12 x TOTAL M12 Gr4.6
C150's	2.4mm	8 x TOTAL M12 Gr 4.6	12 x TOTAL M12 Gr 4.6
C200's	2.4mm	8 x TOTAL M12 Gr 4.6	12 x TOTAL M12 Gr 4.6
C250's	2.4mm	12 x TOTAL M16 Gr8.8	18 x TOTAL M16 Gr 8.8
C300's	3.0 mm	12 x TOTAL M16 Gr8.8	18 x TOTAL M16 Gr 8.8
C350's	3.0mm	12 x TOTAL M16 Gr 8.8	18 x TOTAL M16 Gr 8.8

APEX DETAIL



REFER SPAN TABLES FOR MEMBER SIZES.

SINGLE KNEE TIE

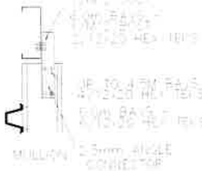


REFER SPAN TABLES FOR MEMBER SIZES.

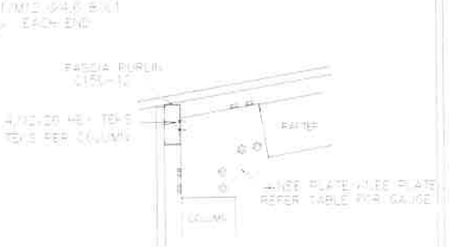
BACK TO BACK KNEE TIE

SIZE	GALV. U-BRACKET	CAST IN DEPTH	SINGLE PORTAL FLANGE BOLTS	BACK TO BACK FLANGE BOLTS
C100	50x5.0 FLAT	150	2 x TOTAL M12 Gr4.6	4 x TOTAL M12 Gr4.6
C150	65x5.0 FLAT	180	4 x TOTAL M12 Gr4.6	8 x TOTAL M12 Gr4.6
C200	65x5.0 FLAT	200	4 x TOTAL M16 Gr4.6	8 x TOTAL M16 Gr4.6
C250	75x5.0 FLAT	250	4 x TOTAL M16 Gr8.8	8 x TOTAL M16 Gr8.8
C300	100x6.0 FLAT	300	4 x TOTAL M16 Gr8.8	8 x TOTAL M16 Gr8.8
C350	100x6.0 FLAT	350	4 x TOTAL M16 Gr8.8	8 x TOTAL M16 Gr8.8

COLUMN BASE DETAIL



GABLE MULLION TO RAFTER DETAIL



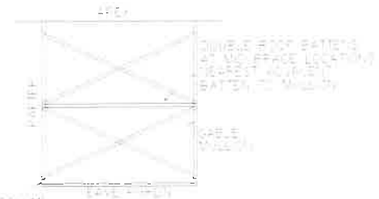
EAVE DETAIL SUIT 64 TOP HATS

EAVE DETAIL SUIT 96 & 120 TOP HATS

BRACING NOTES

1. Long wall cross bracing requirements are provided on the Building Structure Compliance Statement. Ensure sufficient strap or rod braces are provided using the Bracing Capacities table.
2. Roof cross bracing shall be placed in any bay, but must be placed in the same bay. Wall cross bracing shall be placed in either the same bay or the adjacent bay as roof bracing. Wall cross bracing may be placed on one side of structure if bay/s is unavailable due to opening/s.
3. Strap Bracing tie-downs to be 3/12x20 teks for 30mm & 32mm strap & 6/12x20 teks for 38mm & 50mm strap. For C85 Wind Cat's, use 14x25 teks.
4. Doubling up strap cross bracing in a single bay is allowed, but should only be done where alternative bays are not available to brace. Add 90% of bracing value for second set of strap cross brace.
5. End wall cross bracing is required on all End Frames. Building up to 1.5 x longer than span - use 50x1.2mm strap, up to 2 x longer than span - use 12mm rod & up to 3 x longer than span - use 16mm rod. Longer buildings to be referred to engineer. End wall cross bracing is not required if Mid Frame used.
6. Roof bays with double roof bracing sets require a double roof batten at mid brace locations. Double roof batten can be located to underside of rafter. Strap bracing is to join at the nearest batten adjacent to the Gable Mullion.

NOTE :
ROOF & WALL CROSS BRACING SHALL BE REQUIRED FOR EVERY 4 BAYS. REFER FRAMING NOTES FOR DETAILS.



DOUBLE ROOF BRACING SET

SIZE	CAST IN DEPTH	WEB BOLTS
UP TO C20024	70	2 x TOTAL M12 Gr4.6
C250 +	70	2 x TOTAL M16 Gr4.6

GABLE MULLION TO SLAB DETAIL

R&F STEEL BUILDINGS

DRAWING TITLE

SKILLION FRAME PORTAL SHEDS

AREA

CONNECTION DETAILS & NOTES

SKILPORT01

ENGINEERING DOCS.

AMEND DESCRIPTION: FOR CONSTRUCTION
DESIGN VERIFICATION: 01.07.2017

PURLIN SELECTION TABLE

WIND CAT.	3.0m BAYS	3.5m BAYS	4.5m BAYS	6.0m BAYS
N40 / 40D	64TH075 @ 1200	64TH075 @ 1100	96TH075 @ 1400	120TH100 @ 1250
N50 / 50D	64TH075 @ 1000	64TH100 @ 1000	96TH075 @ 1150	120TH100 @ 1100
N61	64TH075 @ 1000	64TH100 @ 1000	96TH100 @ 1000	120TH120 @ 1100
N61D	64TH100 @ 900	64TH120 @ 950	96TH120 @ 900	120TH120 @ 800
C50	96TH075 @ 950	96TH075 @ 950	Z10019 @ 950(1B)	Z15019 @ 950(1B)
C61	96TH120 @ 950	96TH120 @ 950	Z10019 @ 950(1B)	Z15019 @ 950(2B)

ROLLER DOOR MULLION SELECTION

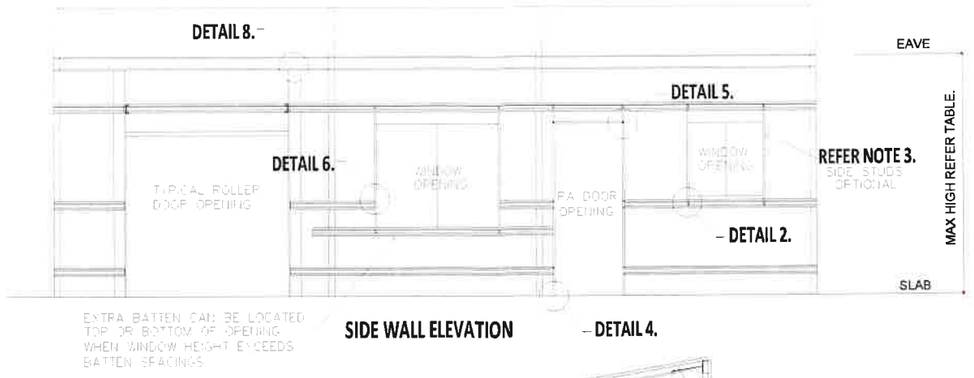
WIND CAT.	3000 HIGH	3600 HIGH	4500 HIGH	5000 HIGH	6000 HIGH	8000 HIGH
N40 / N40D	C10012	C10015	C10019	C15015	C15019	C20019
N50 / N50D	C10012	C10015	C10019	C15015	C15019	C20019
N61 / C50	C10015	C10019	C15012	C15019	C20015	C20019
N61D / C61	C10015	C10019	C15012	C15019	C20015	C20019
C73 / C85	C10019	C15012	C15015	C20015	C20019	C25019

ROLLER DOOR HEADER SELECTION

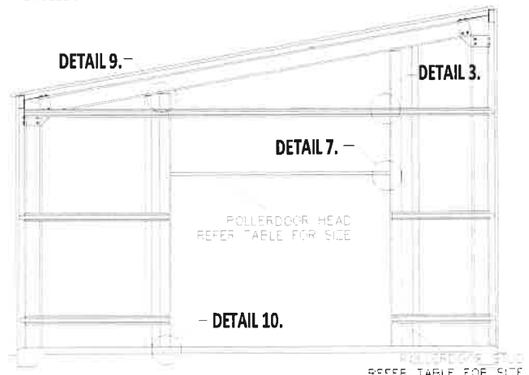
WIND CAT.	2700 WIDE	3000 WIDE	3500 WIDE	4000 WIDE	5000 WIDE	6000 WIDE
N40 / N40D	1.0mm	C10012	C10012	C15012	C15019	C20019
N50 / N50D	1.0mm	C10012	C10012	C15012	C15019	C20019
N61 / C50	1.0mm	C10015	C10019	C15015	C20015	C20019
N61D / C61	1.0mm	C10015	C10019	C15015	C20015	C20019
C73 / C85	C10015	C10019	C15012	C20015	C20024	C25024

GENERAL NOTES

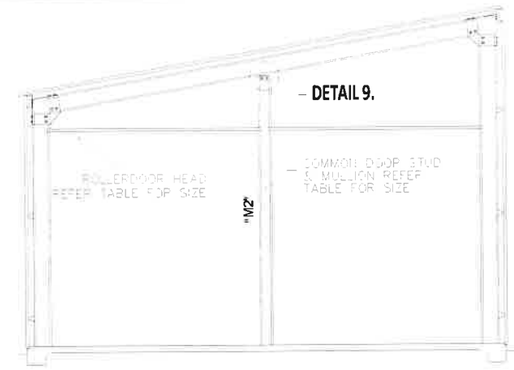
1. Optional Head Selection use in plane C100-12 for N40, N40D, N50, N50D. Use C100-15 N61, N61D, C50, C61, C73 & C85. Maximum opening width 6m.
2. Roller door mullions can be Z-Section or C-Sections. Fixings acceptable for both.



SIDE WALL ELEVATION



GABLE END DOORS



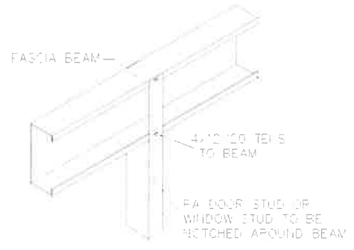
COMMMON ROLLERDOOR STUD & MULLION

NOTES FOR CENTRE END MULLIONS ON FLAT - 'M2'

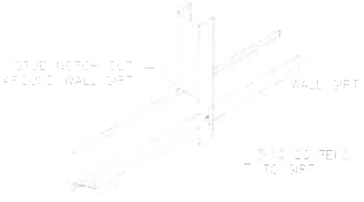
1. NOT SUITABLE FOR USE WITH WINDLOCKED DOOR.
2. MAXIMUM SINGLE OPENING SIZE FOR FLAT MULLION ORIENTATION IS 3000w x 2700h.
3. FOR LARGER OPENING, END MULLION MUST BE PLACED ON EDGE WITH DOOR MULLIONS EITHER SIDE.

CENTRE END MULLIONS ON FLAT SELECTION

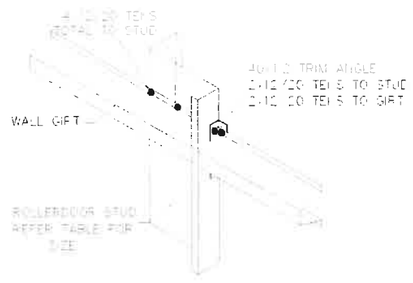
MULLION HEIGHT	MEMBER SCHEDULE						
	N40/N40D	N50/N50D	N61/C50	N61D	C61	C73	C85
3000 HIGH	C15015	C15019	C15019	C15024	C15024	C20019	C20024
4500 HIGH	C15019	C15024	C15024	C20019	C20019	C20024	C25024



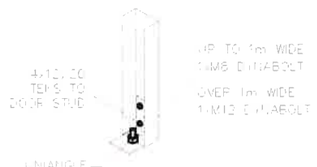
1. PA DOOR / SGD / WINDOW STUD TO FASCIA BEAM DETAIL



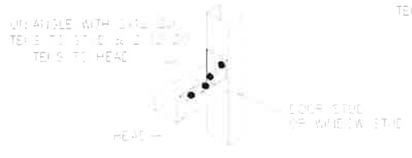
2. WINDOW STUD TO WALL GIRT



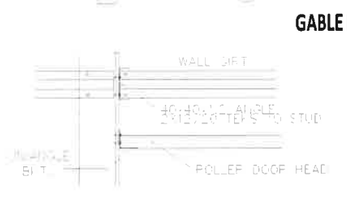
3. WALL GIRT TO ROLLERDOOR STUD



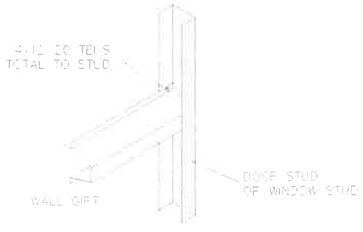
4. PA DOOR/ SGD STUD TO SLAB



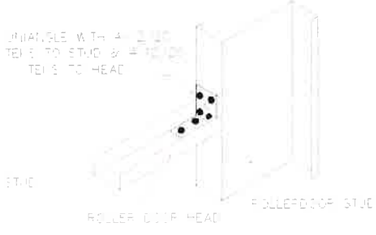
5. DOOR / WINDOW HEAD TO STUD



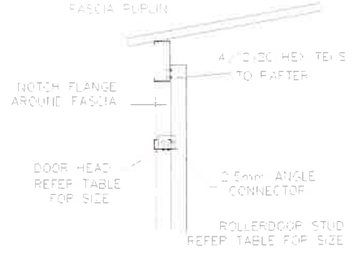
3. ROLLERDOOR STUD TO HEAD DETAIL



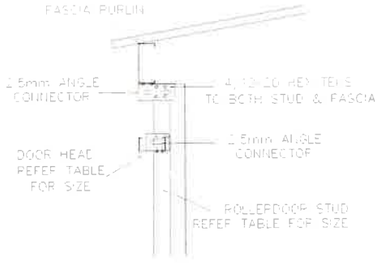
6. WILL GIRT TO STUD DETAIL



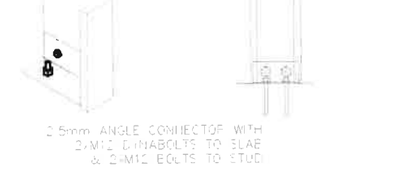
7. DOOR HEAD TO STUD



8. ROLLERDOOR STUD TO FASCIA - SUIT 64 TOP HATS

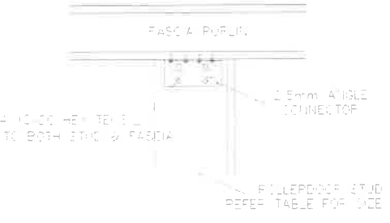


8. ROLLERDOOR STUD TO FASCIA - SUIT 96 & 120 TOP HATS

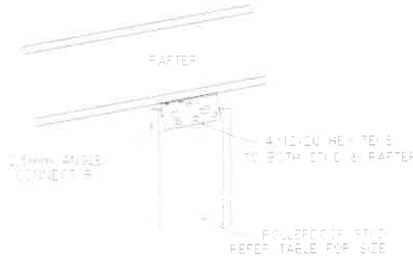


SIZE	CAST IN DEPTH	WEB BOLTS	FLANGE BOLTS
UP TO C20024	70	2 x TOTAL M12 Gr4.6	2 x TOTAL M12 Gr4.6
C250 +	70	2 x TOTAL M16 Gr4.6	2 x TOTAL M16 Gr4.6

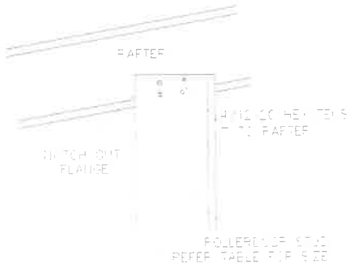
10. ROLLERDOOR STUD TO SLAB



ROLLERDOOR STUD TO FASCIA



9. ROLLERDOOR STUD TO RAFTER WITH BRACKET OPTION



9. ROLLERDOOR STUD TO RAFTER NOTCHED OPTION

R&F STEEL BUILDINGS

DRAWING TITLE

SKILLION FRAME PORTAL SHEDS

AREA

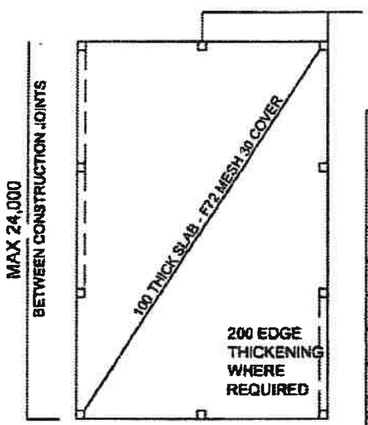
CONNECTION DETAILS & NOTES

SKILPORT02

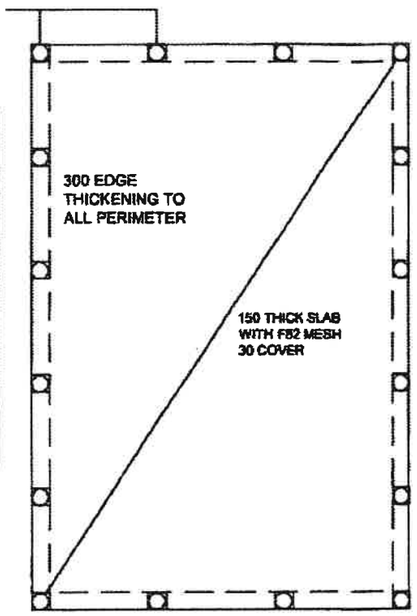
ENGINEERING DOCS.

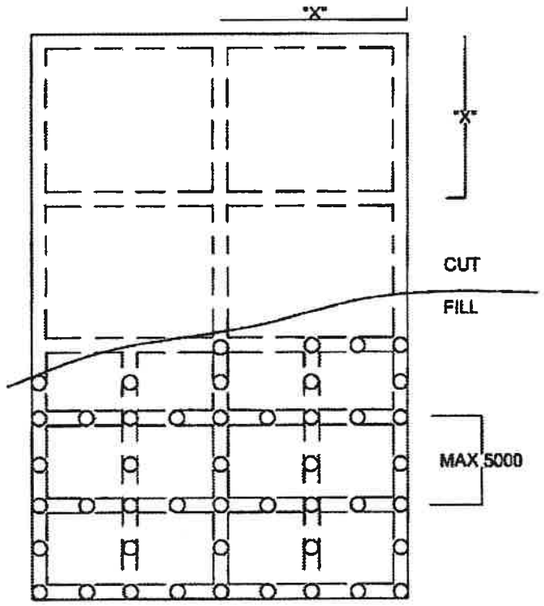
AMEND DESCRIPTION: FOR CONSTRUCTION

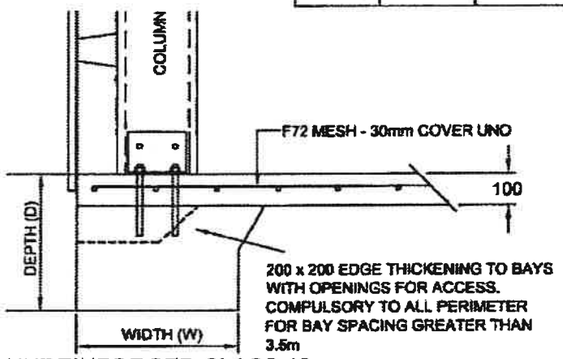
DESIGN VERIFICATION: 01.07.2017



PAD SIZES FOR INDUSTRIAL AND DOMESTIC SLABS			
ROOF AREA	DOMESTIC 100mm SLABS	INDUSTRIAL 125mm SLABS	INDUSTRIAL 150mm SLABS
<10m2	300x300	400x400	400x400
10 - 20 m2	300x300	400x400	400x400
20 - 40 m2	400x400	400x400	400x400
40 - 60 m2	-	400x400	500x500
60 - 80 m2	-	500x500	500x500
80 - 100 m2	-	-	600x600
> 100 m2	-	-	600x600

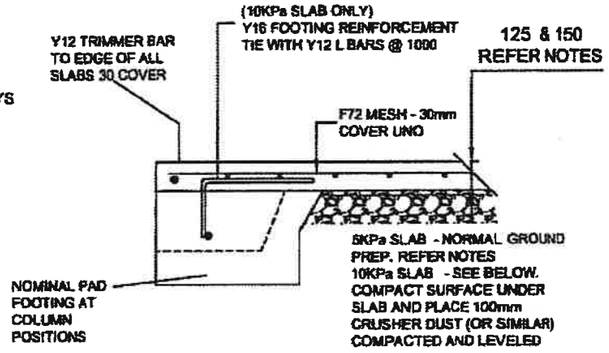






UNREINFORCED CLASS 10a SLAB DETAIL

SUITABLE FOR CLASS 10a SHEDS IN FIRM STABLE GROUND.
MAX SHRINKAGE - CLASS M & M-D.
FOR CLASS H AND H-D SOILS INCREASE SLAB DEPTH TO 110mm AND INSTALL 300Ø MASS CONCRETE PIERS UNDER EACH PAD FOOTING TO 1500 BELOW SURFACE.
SUITABLE FOR SHED SPANS NOT GREATER THAN 12.0m AND BAY SPACING NOT GREATER THAN 4.5m



REINFORCED INDUSTRIAL SLAB DETAIL

SUITABLE FOR CLASS INDUSTRIAL SHEDS IN FIRM STABLE GROUND. MAX SHRINKAGE - CLASS M & M-D.
ENSURE PROPER GROUND PREPARATION UNDER SLAB.

5 KPa LIVE LOAD - 125mm SLAB F72 MESH
10 KPa LIVE LOAD - 150mm SLAB F82 MESH

EDGE BEAM AND SLAB SCHEDULE

SITE CLASS	"D"	SLAB MESH	TRENCH MESH	MAX INTERNAL BEAM SPACING "X"	PIERS
A	300	F72	3-6TM	-	-
S	300	F72	3-6TM	-	-
M	300	F72	3-11TM	-	-
M-D	300	F72	3-11TM	8.0m	-
H	400	F72	3-11TM	7.0m	2.5m Ctrs
H-D	400	F82	3-11TM	6.0m	2.5m Ctrs
E	500	F82	3x Y12TM	5.0m	2.5m Ctrs
P	500	F82	3x Y12TM	5.0m	2.5m Ctrs

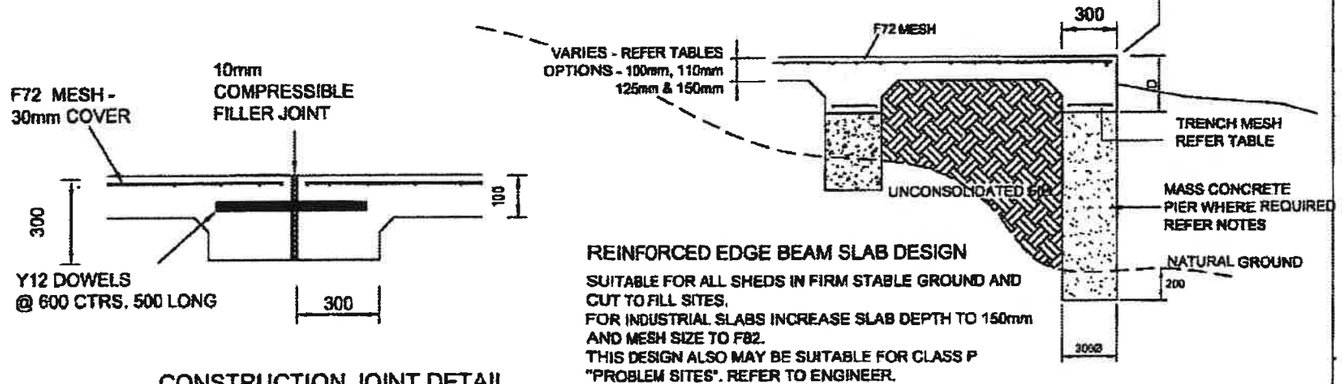
CLASS E & P SITES SHOULD BE REFERRED TO AN ENGINEER FOR CONFIRMATION
CLASS P DESIGN CAN BE USED FOR CUT/FILL SITES.

MINIMUM REINFORCEMENT LAPS:-

Member	Lap	Member	Lap
Y12	350	F8TM MESH	650 425 end 225 side

ENSURE OUTER BAR OF MESH IS WITHIN 20-30mm OF SLAB EDGE.
FOR BOLT SET CLOSE TO SLAB EDGE, A 12mm TRIMMER BAR IS RECOMMENDED.

MAX BEAM SPACING - 5000



REINFORCED EDGE BEAM SLAB DESIGN

SUITABLE FOR ALL SHEDS IN FIRM STABLE GROUND AND CUT TO FILL SITES.
FOR INDUSTRIAL SLABS INCREASE SLAB DEPTH TO 150mm AND MESH SIZE TO F82.
THIS DESIGN ALSO MAY BE SUITABLE FOR CLASS P "PROBLEM SITES". REFER TO ENGINEER.

CONSTRUCTION JOINT DETAIL

NOTES

1. MINIMUM 28 DAY CONCRETE STRENGTH TO BE 20 MPA MAXIMUM AGGREGATE STONE SIZE - 20mm. DESIGN SLUMP TO BE 80mm ± 10mm.
2. EDGE BEAMS TO BE FOUNDED ON NATURAL SOIL OR CONTROLLED COMPACTED FILL.
3. SLABS ON CUT/FILL SITES AND APPLICABLE PROBLEM SOILS MAY USE MASS CONCRETE PIERS PLACED UNDER THROUGH FILL 200mm INTO NATURAL SOIL.
4. SOIL CONDITIONS ARE ASSUMED TO BE CLASS M OR BETTER FOR STANDARD SLABS UNO. TABLED OPTIONS FOR CLASS H, HD & E ARE ALSO PROVIDED.
5. SLAB AND EDGE BEAMS SHALL BE POURED IN ONE CONTINUOUS OPERATION UNO.
6. CONCRETE IS TO BE COMPACTED BY VIBRATION OR OTHER MECHANICAL MEANS.
7. SAWCUTTING OF CRACK CONTROL JOINTS SHALL BE CARRIED OUT WITHIN 48 HRS OF THE PLACING OPERATION
8. A SINGLE LAYER OF 200 MICRON PVC SHEETING SHALL PLACED UNDER THE SLABS. 50mm CRUSHER DUST IS RECOMMENDED FOR A LEVEL EVEN COMPACTED SURFACE.
9. CURING OF SLAB SURFACE AGAINST EXCESSIVE MOISTURE LOSS SHALL BE CARRIED OUT FOR 7 DAYS AFTER PLACING. APPROVED CURING METHODS ONLY.
10. SLABS PLACED WIDER THAN 15m SPAN SHALL HAVE F82 MESH AND 150 TH SLAB AS STANDARD .
11. ALL SLABS PLACED LONGER THAN 18m (ONE POUR) SHALL HAVE F82 MESH AS STANDARD
    MAXIMUM LENGTH OF SLAB BETWEEN CONSTRUCTION JOINTS
    100mm SLAB - 24m
    150mm SLAB - 30m

DO NOT SCALE

STANDARD SLABS & FOUNDATIONS

CLIENT: –

SITE ADDRESS: –

DWG. NO. PREC–1010

PIER ONLY DETAILS FOR PORTAL FRAME SHEDS

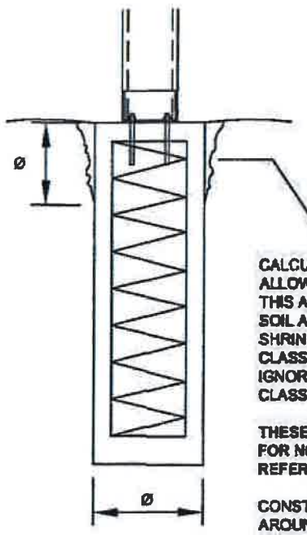
THE TABLE BELOW REPRESENTS THE REQUIREMENTS FOR ENCLOSED SHEDS OF BAY SIZES AND SPANS NOTED
MAXIMUM HEIGHT OF SHEDS FOR THESE FOOTINGS SHALL NOT BE MORE THAN 6M AND NOT MORE THAN 66% OF SPAN.
THE SPAN, BAY AND HEIGHTS NOTED IN THE TABLE REPRESENT MINIMUM REQUIREMENTS

3m BAYS	4m Shed Span		6m Shed Span		7.5m Shed Span		9m Shed Span		12m Shed Span		15m Shed Span		18m Shed Span		21m Shed Span		24m Shed Span	
	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth
N2	300	700	300	700	300	700	300	900	450	900	450	1000	450	1000	450	1000	450	1000
N3	300	700	300	700	300	700	300	900	450	900	450	1200	450	1200	450	1200	450	1200
N4	300	800	300	800	300	900	300	1000	450	1000	450	1500	450	1500	450	1500	450	1500
C1	300	800	300	800	300	900	300	1000	450	1000	450	1500	450	1500	450	1500	450	1500
C2	300	900	300	900	300	1000	300	1200	450	1200	450	1800	450	1800	450	1800	450	1800

3.5m BAYS	4m Shed Span		6m Shed Span		7.5m Shed Span		9m Shed Span		12m Shed Span		15m Shed Span		18m Shed Span		21m Shed Span		24m Shed Span	
	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth
N2	300	700	300	700	300	900	300	900	450	900	450	1000	450	1000	450	1000	600	1200
N3	300	700	300	700	300	900	300	900	450	900	450	1200	450	1200	450	1200	600	1500
N4	300	800	300	800	300	900	300	1000	450	1000	450	1500	450	1500	450	1500	600	1800
C1	300	800	300	800	300	900	300	1000	450	1000	450	1500	450	1500	450	1500	600	1800
C2	300	900	300	900	300	1000	300	1200	450	1200	450	1800	450	1800	450	1800	600	2200

4.5m BAYS	4m Shed Span		6m Shed Span		7.5m Shed Span		9m Shed Span		12m Shed Span		15m Shed Span		18m Shed Span		21m Shed Span		24m Shed Span	
	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth
N2	300	900	300	900	300	900	450	900	450	900	450	1000	450	1000	450	1200	600	1200
N3	300	900	300	900	300	900	450	900	450	1000	450	1200	450	1200	600	1200	600	1500
N4	300	900	300	900	300	1000	450	1000	450	1200	450	1500	450	1500	600	1500	600	1800
C1	300	900	300	900	300	1000	450	1000	450	1200	450	1500	450	1500	600	1500	600	1800
C2	300	900	300	1000	300	1200	450	1200	450	1500	450	1800	450	1800	600	2000	600	2000

6m BAYS	4m Shed Span		6m Shed Span		7.5m Shed Span		9m Shed Span		12m Shed Span		15m Shed Span		18m Shed Span		21m Shed Span		24m Shed Span	
	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth	Diam	Depth
N2	300	900	450	900	450	900	450	900	450	1000	450	1200	450	1200	600	1200	600	1200
N3	300	900	450	900	450	900	450	1000	450	1200	600	1000	600	1200	600	1200	600	1500
N4	300	900	450	1000	450	1000	450	1200	450	1500	600	1200	600	1500	600	1500	600	1800
C1	300	900	450	1000	450	1000	450	1200	450	1500	600	1200	600	1500	600	1500	600	1800
C2	300	1000	450	1200	450	1300	450	1500	450	1800	600	1500	600	2000	600	2000	600	2200

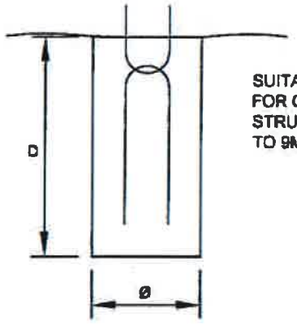


CALCULATION OF PIER SKIN RESISTANCE ALLOWS FOR IGNORING THE TOP SECTION. THIS ALLOWS FOR SEASONAL CHANGE OF THE SOIL AND IS DEPENDENT ON THE SOIL'S SHRINKAGE CAPABILITY.
CLASS M SOILS - 1 x PIER DIAM SHOULD BE IGNORED
CLASS H AND E SOILS - IGNORE 1.5 x PIER DIAM.

THESE TABLED PIERS WILL NOT BE SUITABLE FOR NON-COHESIVE OR LOOSE FILL SITES. REFER DESIGN TO ENGINEER.

CONSTRUCTING A CONCRETE PATHWAY AROUND THE SHED PIERS AND/OR PIERS AS PART OF THE SLAB WILL INCREASE THE NETT STRENGTH OF A PIER IN GROUND.

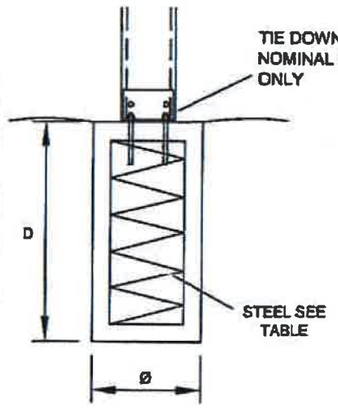
DESIGN ALLOWANCES
SKIN FRICTION



SUITABLE ONLY FOR CLASS 10a STRUCTURES UP TO 9M SPAN

REINF	Ø	MAX DEPTH
1 x Y12	300	900
2 x Y12	300	1200
2 x Y16	450	1200

TYPE 1 PIERS



Ø	MAX DEPTH	LIGS	STEEL
450	900	6mm @ 450	4 x Y12
450	1200	6mm @ 300	4 x Y12
450	2000	6mm @ 250	4 x Y12
600	1200	6mm @ 250	6 x Y12
600	1800	10mm @ 300	6 x Y16
600	2600	10mm @ 250	6 x Y16

TYPE 2 PIERS

NOTES

1 THESE PIER DETAILS ASSUME A **MINIMUM** SITE CLASSIFICATION OF **SOIL CLASS "M".**
2 **FOR CLASS H & HD SITES,** INCREASE DEPTH OF PIER BY ONE PIER DIAMETER. CLASS H PIERS SHALL BE A MINIMUM DEPTH OF 1500mm
3 MINIMUM BEARING CAPACITY OF PIER BASE SHALL BE 400KPA.
4 FOUNDING PIERS IN FILL SHALL NOT BE PERMITTED.
5 CONCRETE SHALL BE A MINIMUM OF N20 WITH A DESIGN SLUMP OF 80 mm ± 20 mm.
6 CONCRETE SHALL BE MECHANICALLY COMPACTED OR BY HAND RODDING.
7 PIER SHALL BE LEFT PROUD OF THE GROUND SURFACE 50mm TO 150mm PERMITTED. TOP SHALL BE SLOPED TO ALLOW WATER TO DRAIN AWAY.
8 STANDARD RULES FOR A CLASS H SITE ACCORDING TO AS2870 REGARDING SURROUNDING FLORA PLACEMENT SHALL APPLY.
9 **NON-COHESIVE SOILS** SUCH AS SANDS AND LOOSE SILTS SHALL BE TREATED AS "PROBLEM SITES" AND SHALL NOT BE COVERED BY THIS DRAWING.
10 **CLASS E AND E-D SITES** SHALL ALSO BE ALLOWED USING THESE TABLES WITH THE FOLLOWING PROVISIONS:-
> PIER DEPTH SHALL BE A MINIMUM OF 1800mm
> TYPE 1 PIERS SHALL NOT BE PERMITTED.
> INCREASE TABLED DEPTHS BY ONE AND A HALF PIER DIAMETERS
11 THE PORTAL SHED DESIGNS FOR THESE PIERS ARE ASSUMED THE FOLLOWING INTERNAL PRESSURE COEFFICIENTS
NON-CYCLONIC - +0.2
CYCLONIC - +0.7
12 **MACHINERY SHEDS** AND OTHER OPEN SIDED TYPE SHEDS SHALL USE THE PIER DETAILS FOR CYCLONIC CONDITIONS.
13 **ROOF ONLY BUILDINGS** IN C1 CATEGORY SHALL USE N3 CASE FOR PIER SELECTION. C2 WIND CATEGORY SHALL USE N4.
14 **AWNINGS & END WALL COLUMNS** SHALL USE SHED FOOTINGS OF PORTALS CARRYING SIMILAR ROOF AREAS.
15 THESE PIER DESIGNS ARE BASED ON A MINIMUM ALLOWABLE SOIL SHEAR STRESS OF 50KPa

R&F STEEL BUILDINGS

DO NOT SCALE

STANDARD SLABS & FOUNDATIONS

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