ENGINEERING SCHEDULE

CERTIFIED STEEL PORTAL FRAME SHED DESIGN FOR "REGION A" TERRAIN CATEGORY 2.0, 2.5 & 3.0 - IMPORTANCE LEVEL 2.
Internal Pressure: 0.5
Design Snow Load: 0.00 KPa, Roof Snow Load: 0.00 KPa

Customer: RJ and CL Rice
Site Address: 13 Railway Parade, Gravesend NSW 2401

Main Building: Span: 11, Length: 10, Height: 4, Roof Pitch: 11 degrees
The length being comprised of 3 bays, the largest bay is 3.333m bays.
Left LeanTo: NA
Right LeanTo: NA

Total Kit Weight: 3525.42kg

INTERNAL PORTALS	
Column:	C25019
Rafter:	C25019
Knee Brace:	C15024
Knee Brace Length:	2500
Apex Brace:	NA
Apex Brace Length:	NA

END PORTALS	
Column:	C25019
Rafter:	C25019
Knee Brace:	NA
Knee Brace Length:	NA
Apex Brace:	NA
Apex Brace Length:	NA
Endwall Mullion:	C25019

LEFT LEAN TO PORTALS	
Internal Column:	NA
Internal Rafter:	NA
End Column:	NA
End Rafter:	NA
Knee Brace:	NA
Knee Brace Length:	NA

RIGHT LEAN TO PORTALS	
Internal Column:	NA
Internal Rafter:	NA
End Column:	NA
End Rafter:	NA
Knee Brace:	NA
Knee Brace Length:	NA

NOTE: All unclad intermediate columns are always back to back (refer to drawing: Floor Plan).

PURLINS AND GIRTS			
Eave Purlin:	TH120100		
Side Wall Girts:	TH120100	Max Spacing: 1250	Overlap: 10%
Front End Wall Girts:	TH120100	Max Spacing: 1250	Overlap: 10%
Back End Wall Girts:	TH120100	Max Spacing: 1250	Overlap: 10%
Roof Purlins:	TH120100	Max Spacing: 1250	Overlap: 10%

NOTE: Girt spacing will vary to a maximum 1.25m where window/s are located.

FASTENERS	
Sleeve Anchor Bolts:	M16x105 Sleeve Anchor
Frame Bolts:	M16x45 Purlin Assembly Zinc (Mild)
Frame Screws:	Frame Screw 14x14x22
Cross Bracing Strap:	32mm x 1.2 strap
Open Bay Header Height:	NA

COLOUR SCHEDULE	
Roof Sheets:	Slate Grey
External Wall Sheets:	Slate Grey
Roller Doors:	Slate Grey
Flashings:	Slate Grey
PA Doors:	Slate Grey
Windows:	NA

DOMESTIC & LIGHT INDUSTRIAL STEEL PORTAL FRAME SHED STRUCTURES
This structure is designed in compliance with AS4600, AS3600 and AS1170 1 to 4 as Importance Level 2 with a Live Load of 0.25kPa as "Air Leaky Structures" providing stability when openings are prevalent.

The structures are clad with corrugated pre-painted finish, 0.42mm walls and 0.42mm roof (compliant with AS1562.1 Metal) over cold formed 450 to 550mPa galvanized steel C sections primary frames.

Primary framing is fastened together with 4.6 Class galvanized bolts adequately tensioned on ground prior to erection.

Secondary framing steel bracing, with purlins and girts lapped, are all tek fastened to primary steel with a minimum of two (2) teks per connection as specified in details.

All rainwater products are compliant with AS2179.1 (Metal).

ENGINEERING
The undersigning engineer has checked that the design of the structure complies with relevant current Australian Standards as stated above and the following i.e AS4671- 2001 Steel Reinforcing materials, AS3600 - Concrete structures. However, he will not be present during construction, neither will he conduct inspections nor construction supervision.

The class 10a buildings are designed for erection on pad footings or slab based on soil of classification "A"-"P" with minimum bearing capacity 100kPa (i.e. organic soil is to be removed to a suitable material below natural surface).

Where (suitable) fill is required to level the site, it should be placed and compacted in layers of 150mm maximum.

Concrete pad footings and slab supply and placement is to be in compliance with AS2870-2011 Residential Slabs & Footings, AS3600-2009 Concrete Structures for A2 and B2 exposure (i.e. 25mPa strength @ 28 days strength) with recommended slump 75 to 80mm for light pneumatic tyred traffic all trafficable floors.

For sites where these conditions are considered to be inadequate, a customized foundation design for the structure can be supplied to suit a specific purpose.

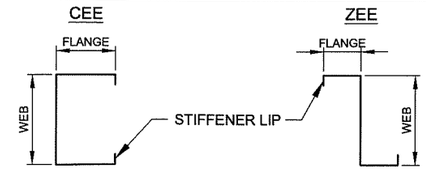
CONSTRUCTION
Erection of the structure is to be in compliance with local and state ordinances,

Occupational Health and Safety Regulations and with plans provided.

GENERAL
The designs as portrayed on the drawings remain the intellectual property of Best Sheds Pty Ltd and are provided for building approval and construction purposes only and are only valid when blue ink signed and dated by the engineer.

SNOW LOAD
Following conditions only apply to buildings with snow loading:
- No maintenance or roof traffic permitted on the roof while there is snow present.
- No other structure to be erected within 500mm of the gutters of this building.

COMPONENT DIAGRAM



TYP. = TYPICAL U.N.O. = UNLESS NOTED OTHERWISE

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Site Address: 13 Railway Parade
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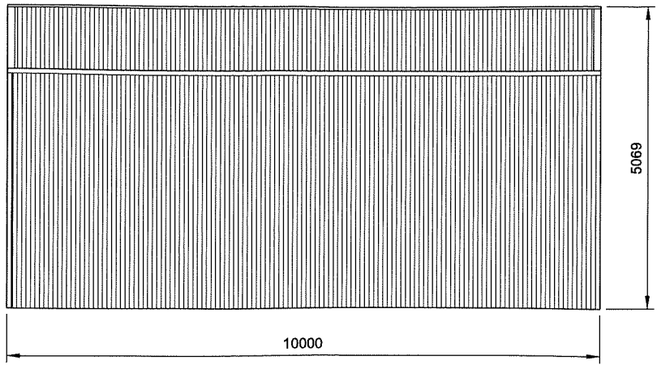
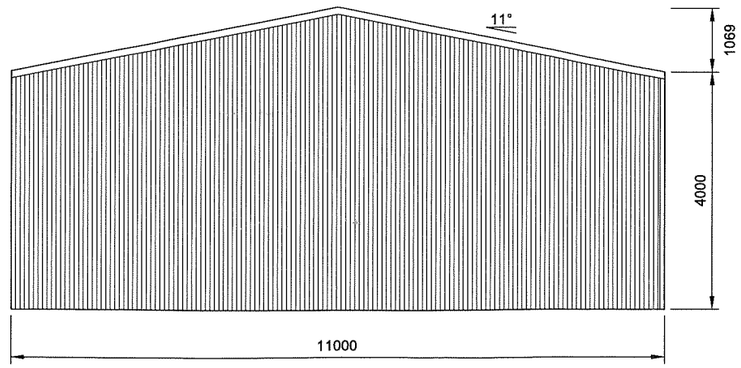
NSW, 2401

DATE 02-02-2023
JOB NO. 3220613226
SHEET 1 of 7



2/2 LEFT ELEVATION

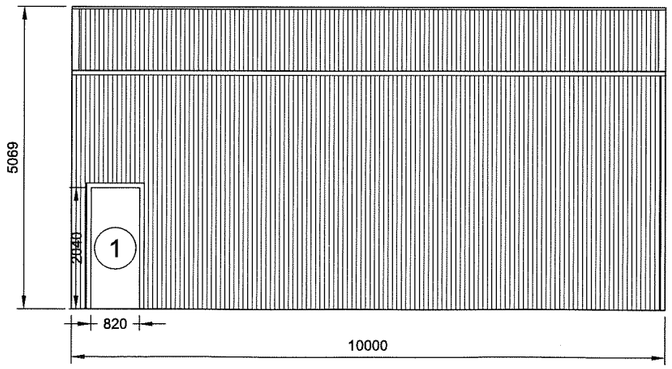
SCALE: 1:100



3/2 REAR ELEVATION

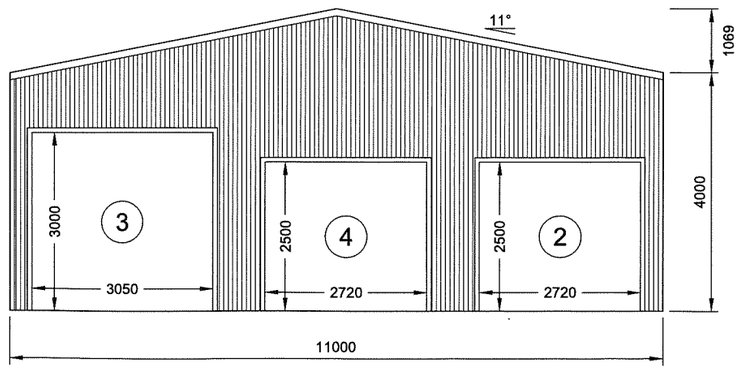
SCALE: 1:100

FRAME #4



1/2 RIGHT ELEVATION

SCALE: 1:100



4/2 FRONT ELEVATION

SCALE: 1:100

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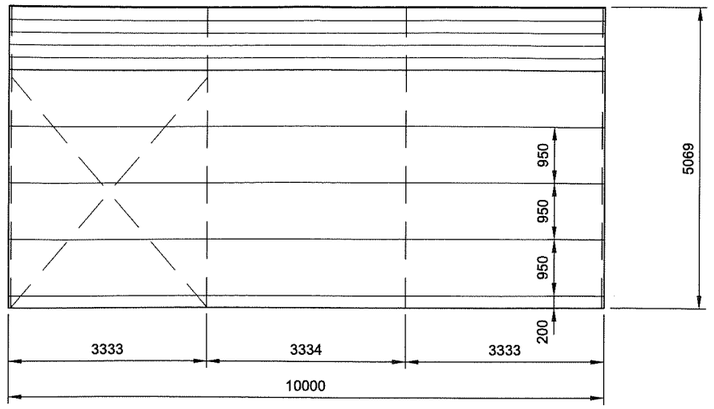
SHEET 2 of 7



2/3 LEFT ELEVATION

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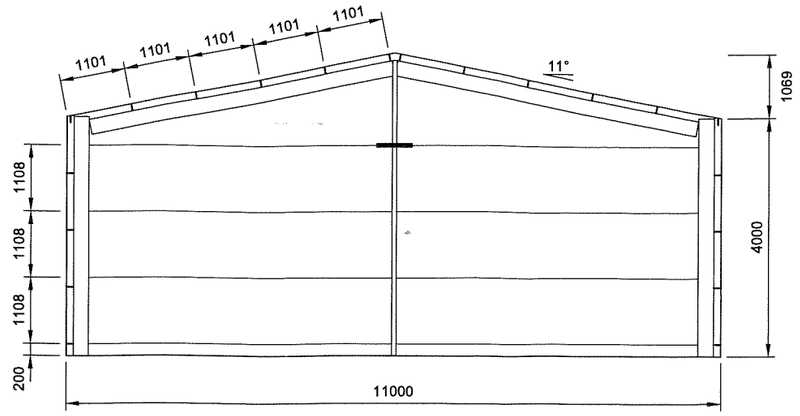
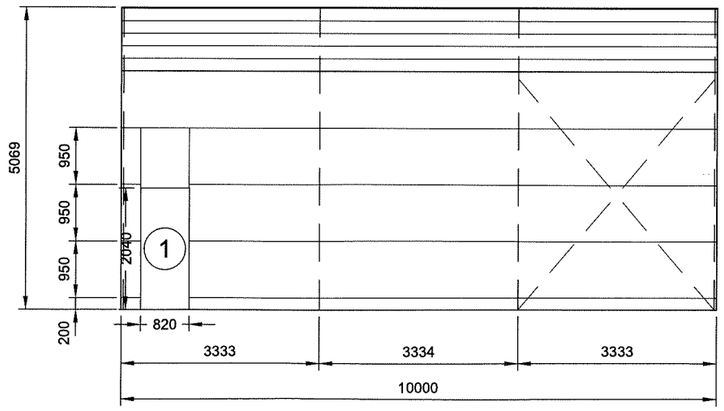


3/3 REAR ELEVATION

SCALE: 1:100

FRAME #4



1/3 RIGHT ELEVATION

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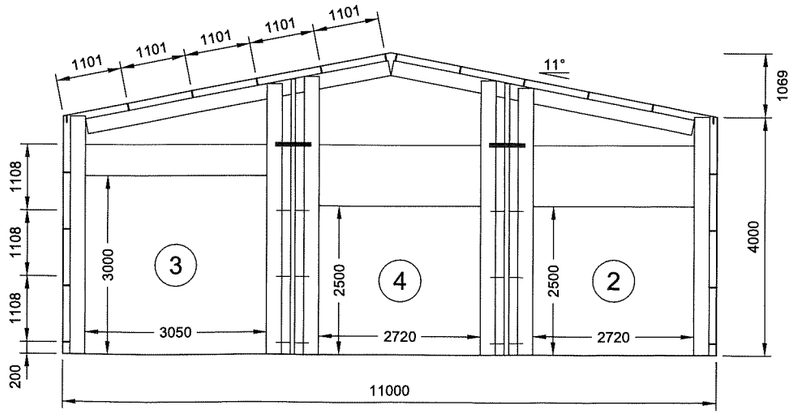

4/3 FRONT ELEVATION

SCALE: 1:100

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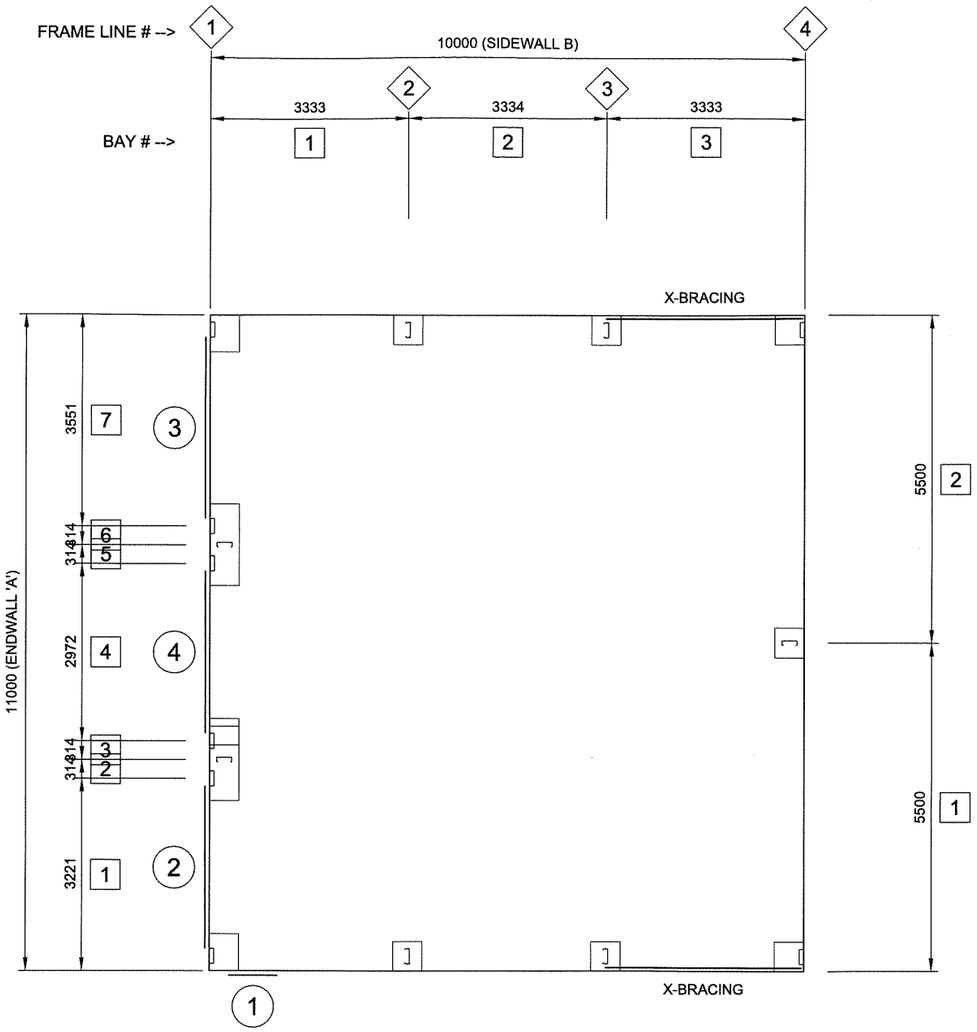
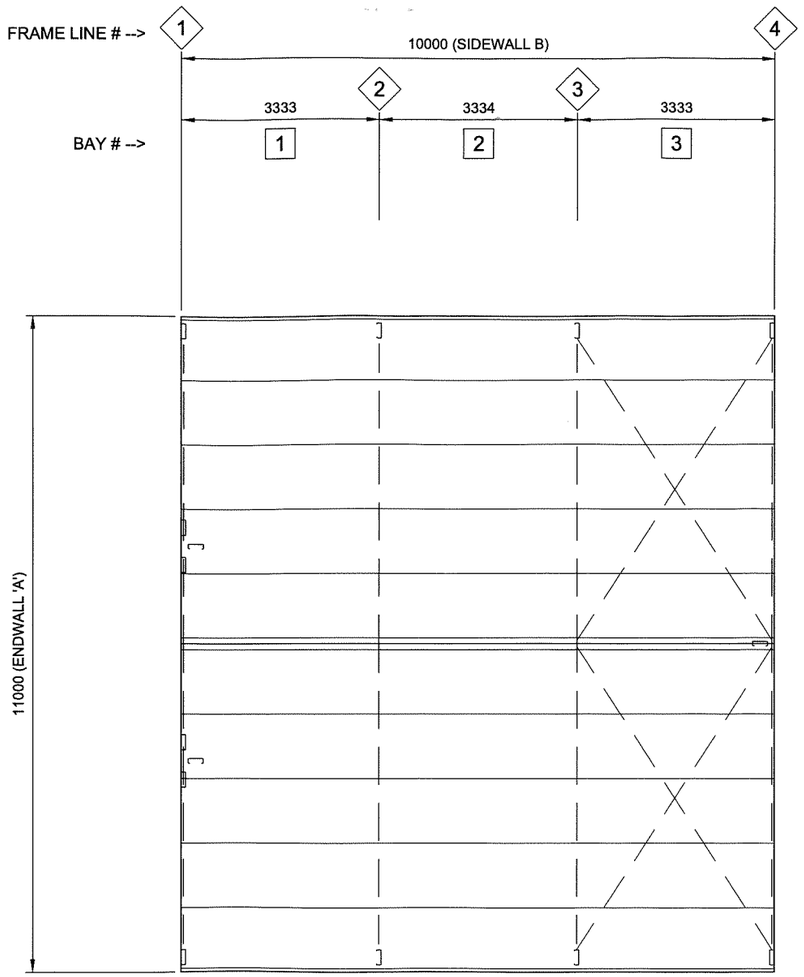
SHEET 3 of 7



1/4 FLOOR PLAN

SCALE: 1:100



2/4 ROOF FRAMING PLAN

SCALE: 1:100

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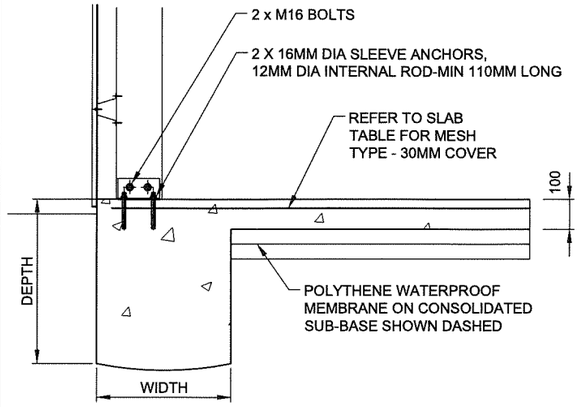
SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL
(100mm MINIMUM CONRETE SLAB INCLUDED)

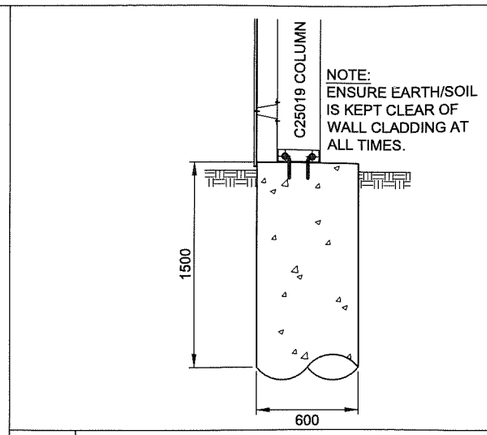
SOIL CLASSIFICATION (COMPACTED)	REINFORCING IN SLAB	EDGE BEAM	PIER	EDGE BEAM (slab thickness not included)	
	MESH REINFORCING	TRENCH MESH	ø x DEPTH	DEPTH	WIDTH
A, S, & M	SL72	—	450 x 400	—	—
M - D	SL82	L11TM3	—	300	300
H TO H - D	SL82	L11TM3	—	400	300
E TO E - D	SL82	L11TM4	—	400	400
P (DROP EDGE BEAM OR STANDARD EDGE BEAM WITH PIERS UNDER COLUMNS 300 INTO FIRM GROUND)	SL82	L11TM4	450ø	400	400

THICKNESS: 100MM WITH MINIMUM 30MM COVER. REFER TO SLAB FOUNDATION TABLE FOR REINFORCING SPECIFICATION

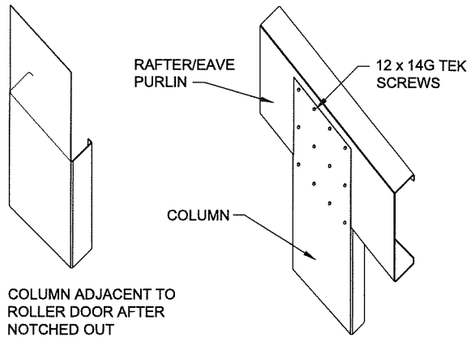
STRENGTH: 25mPa

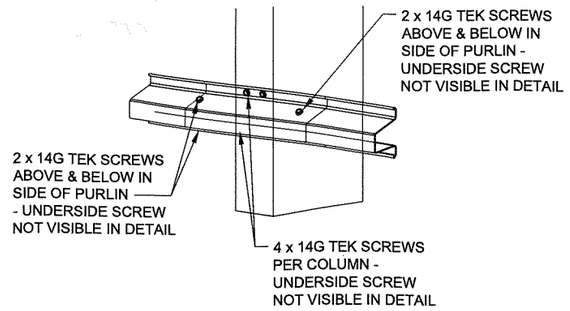


Y SLAB DETAIL

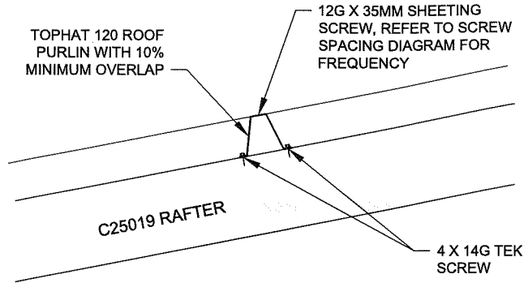


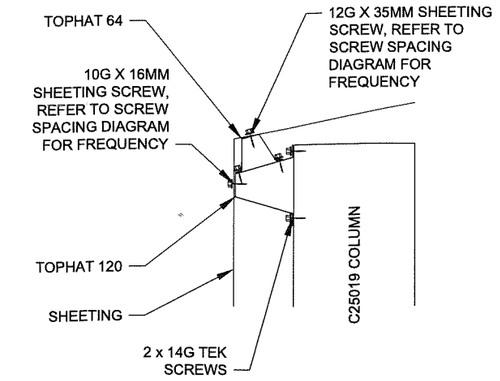
Z ALTERNATE PIER DETAIL



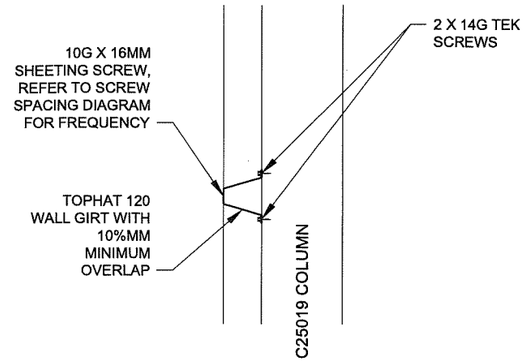


H TOP HAT CONNECTION

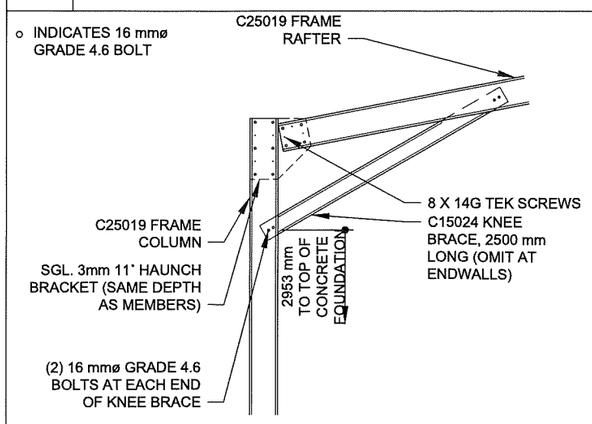




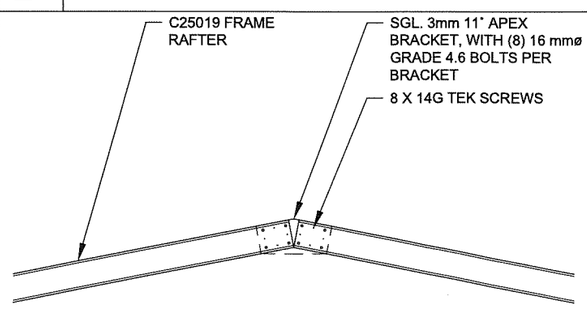
I EAVE CONNECTION



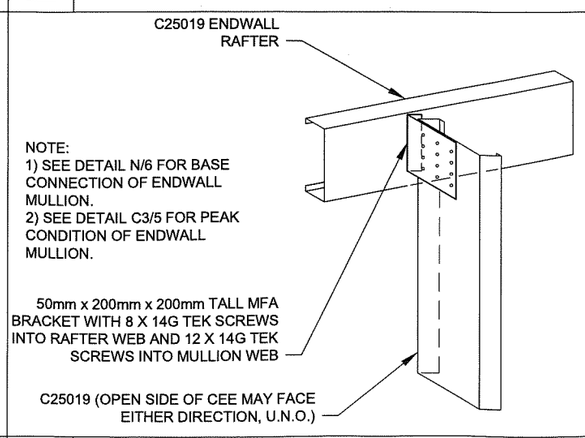
A HAUNCH CONNECTION



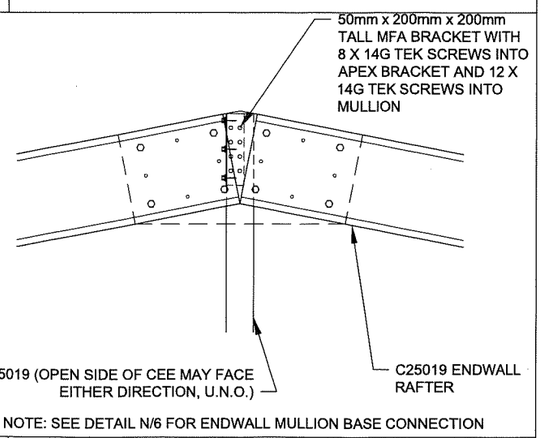
B APEX CONNECTION



C1 ENDWALL MULLION TO RAFTER



C3 ENDWALL MULLION TO RAFTER PEAK CONDITION



NOTE: SEE DETAIL N/6 FOR ENDWALL MULLION BASE CONNECTION

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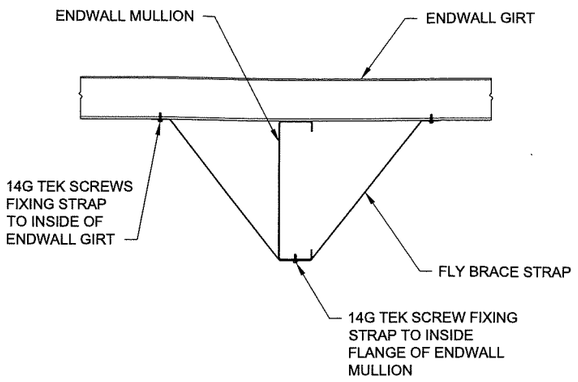
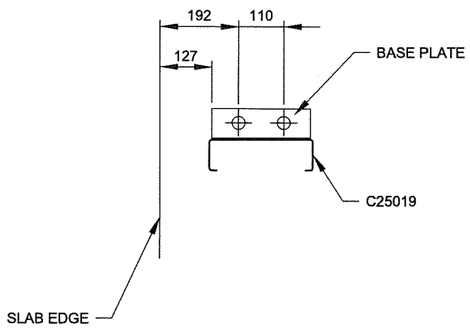
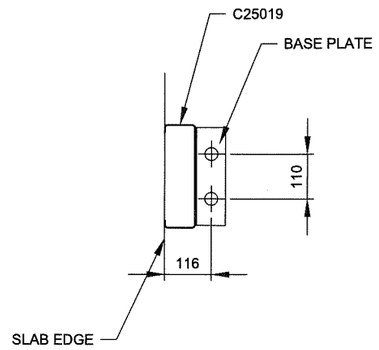
SHEET 5 of 7



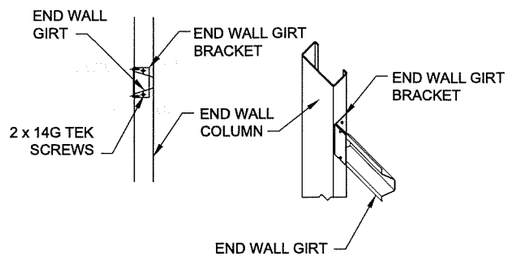
R FLYBRACE



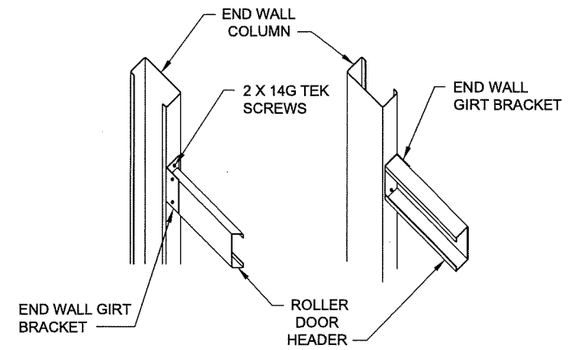
N ENDWALL MULLION BASE



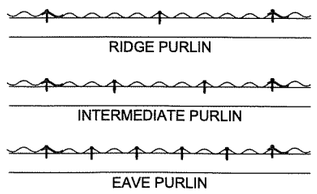
O ROTATED ENDWALL MULLION BASE



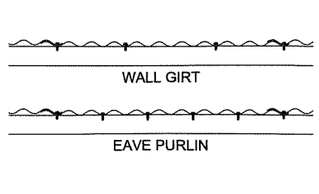
P ENDWALL GIRT BRACKET



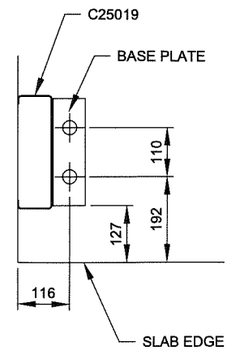
Q END DOOR HEADER AND JAMB



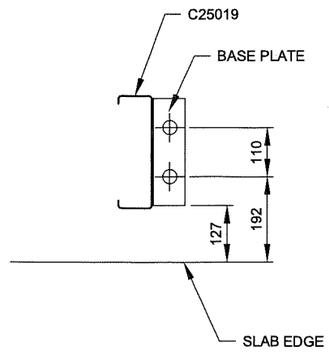
J ROOF SHEETING



K WALL SHEETING



L CORNER COLUMN BASE



M INTERNAL COLUMN BASE

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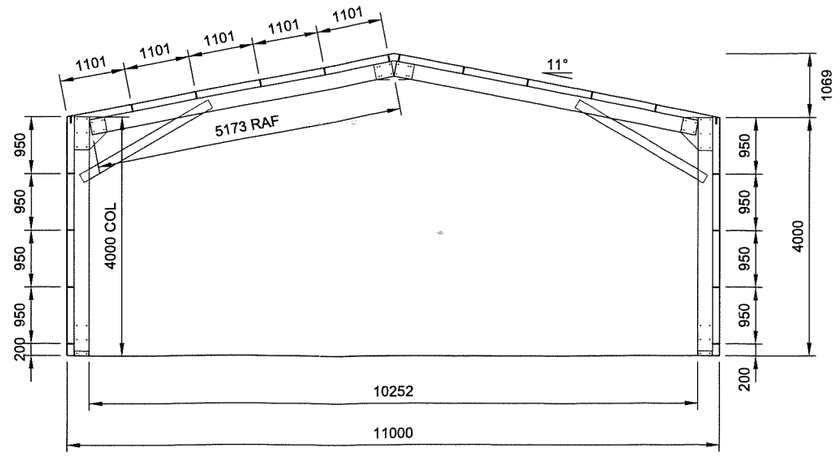
SHEET 6 of 7



1/7 TYP. FRAME CROSS-SECTION

SCALE: 1:100

FRAMES 2, 3

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