

ENGINEERING SCHEDULE

CERTIFIED STEEL PORTAL FRAME SHED DESIGN IN ACCORDANCE WITH NCC 2022 FOR SITE WIND SPEED "40.93m/s", WIND REGION "A3", TERRAIN CATEGORY "2", IMPORTANCE LEVEL "2"

Internal Pressure: 0.5  
Design Snow Load: 0.00 KPa, Roof Snow Load: 0.00 KPa

Customer: Darren Moyses  
Site Address: 4 Supreme Wy, Nemingah NSW 2340

Main Building: Span: 9, Length: 18, Height: 4.2, Roof Pitch: 11 degrees  
The length being comprised of 5 bays, the largest bay is 3.8m bays.  
Left LeanTo: NA  
Right LeanTo: NA

Total Kit Weight: 4944.54kg

INTERNAL PORTALS	END PORTALS
Column: 2C15024 Rafter: 2C15024 Knee Brace: 2C10010 Knee Brace Length: 1600 Apex Brace: 2C10010 Apex Brace Length: 4000	Column: C15024 Rafter: C15024 Knee Brace: NA Knee Brace Length: NA Apex Brace: NA Apex Brace Length: NA Endwall Mullion: C15024
LEFT LEAN TO PORTALS	RIGHT LEAN TO PORTALS
Internal Column: NA Internal Rafter: NA End Column: NA End Rafter: NA Knee Brace: NA Knee Brace Length: NA	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: C10010		
Side Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Front End Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Back End Wall Girts: TH64100	Max Spacing: 1250	Overlap: 10%
Roof Purlins: TH64100	Max Spacing: 1000	Overlap: 10%

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

FASTENERS
Sleeve Anchor Bolts: M12x80 Sleeve Anchor Yellow Zinc Frame Bolts: M12x30 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: Off White External Wall Sheets: Off White Roller Doors: Mountain Blue Flashings: Mountain Blue PA Doors: Mountain Blue Windows: Mountain Blue

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.

25mm deep concrete saw cut, to be made into the surface of the concrete slab every 6m in width or length as crack control joints.

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,

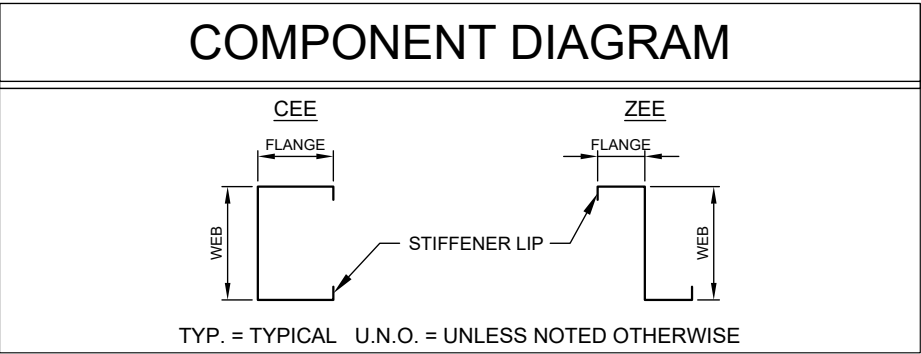
Occupational Health and Safety Regulations and with plans provided.

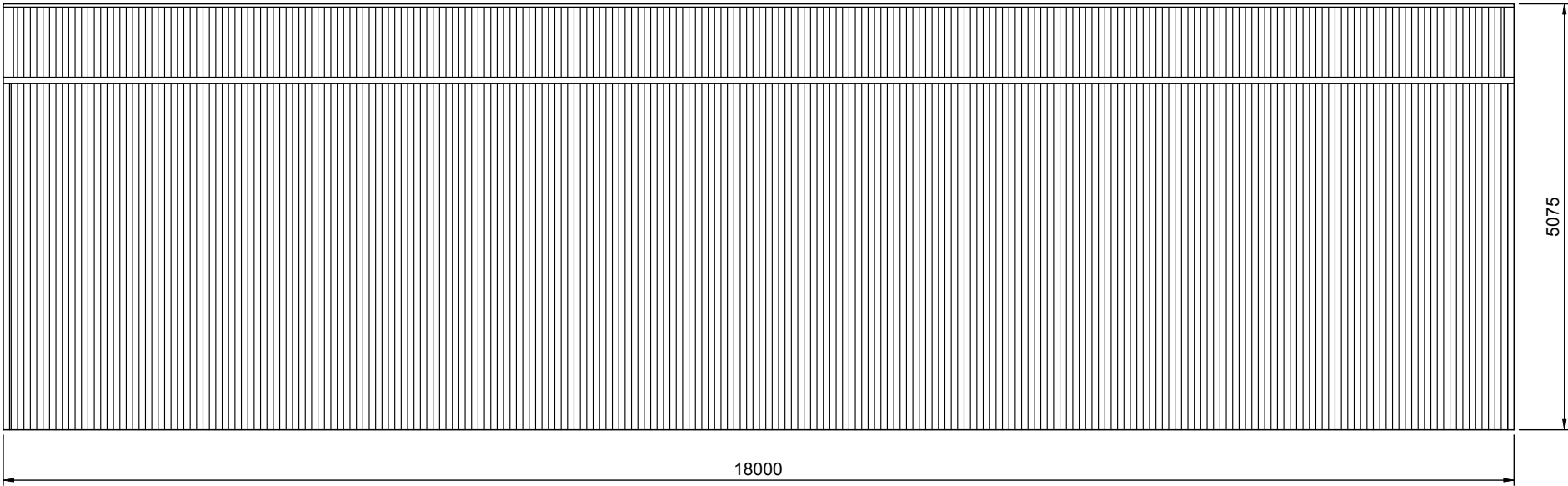
GENERAL

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.

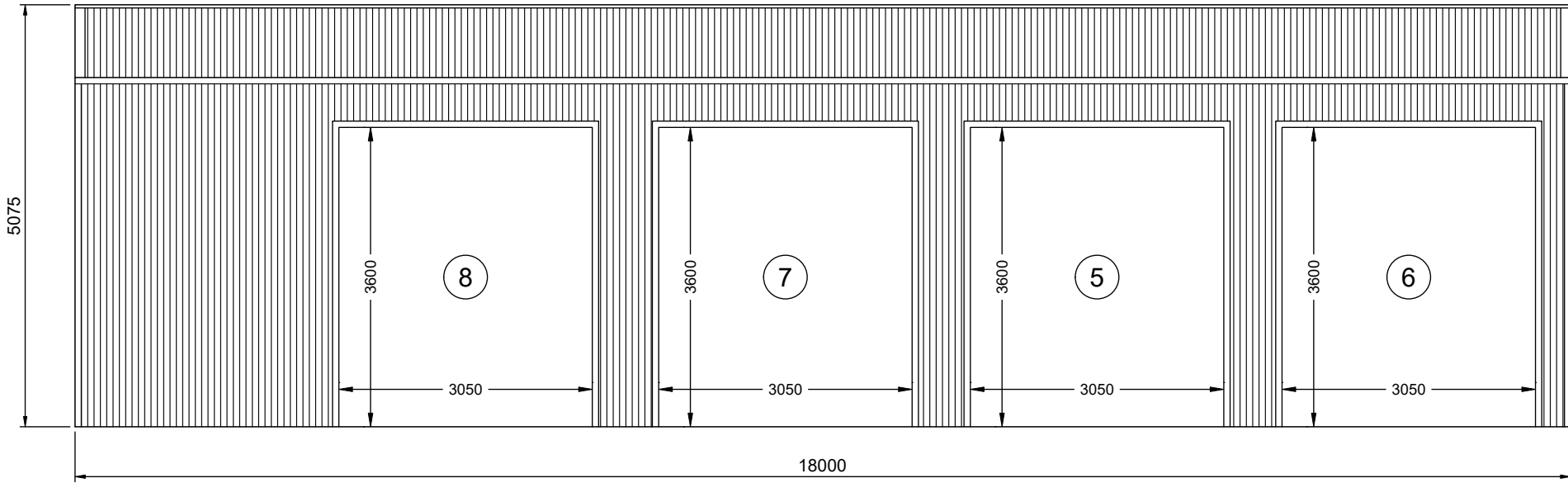
SNOW LOAD

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.

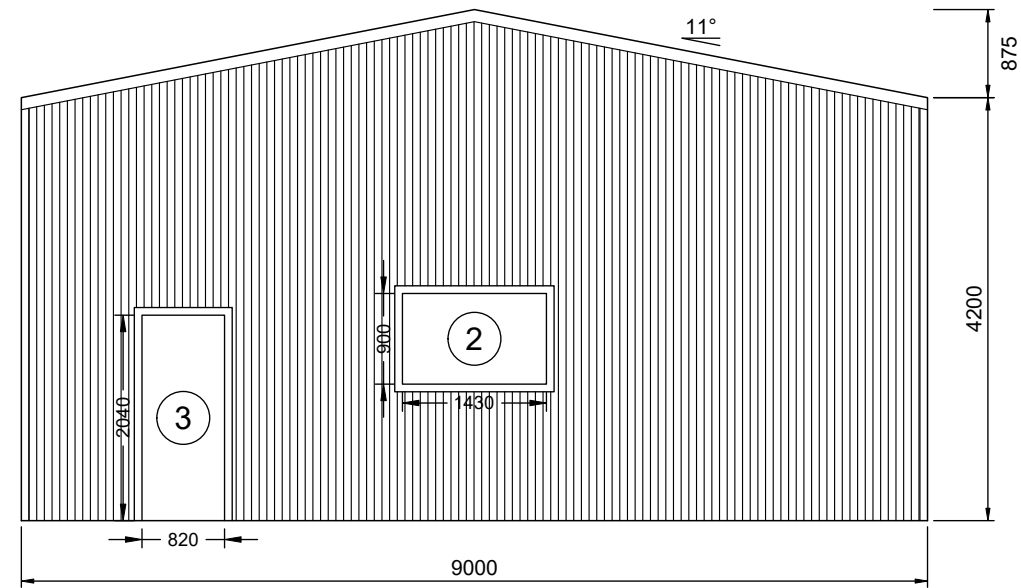




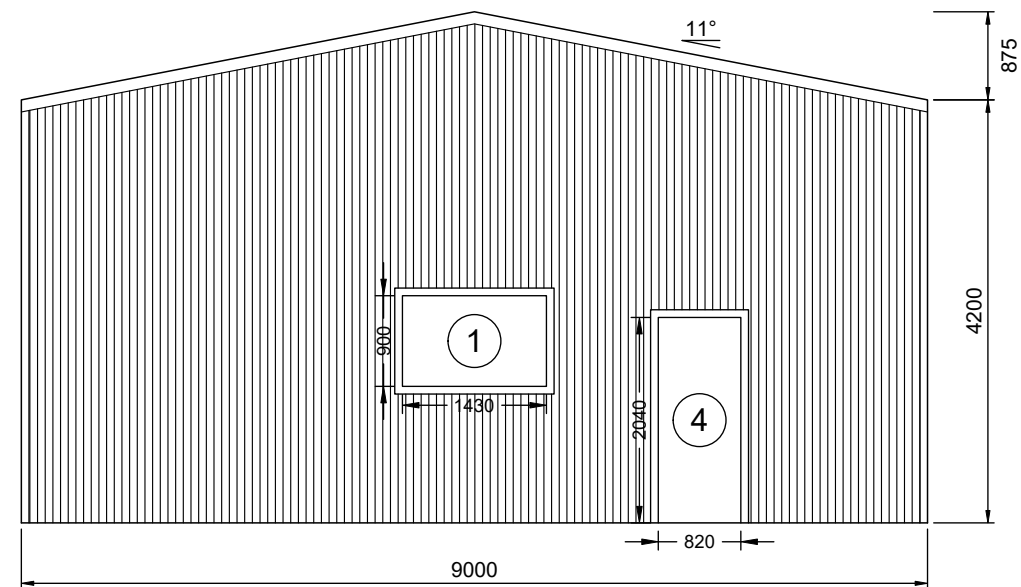
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2 SCALE: 1:75



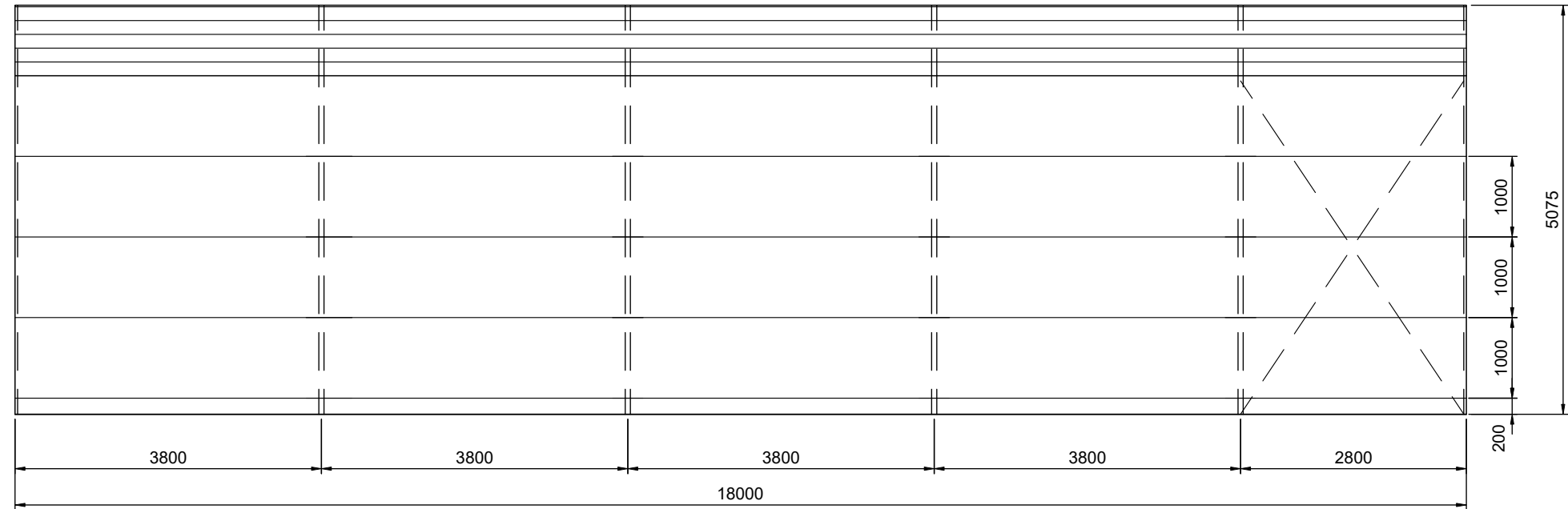
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2 SCALE: 1:75



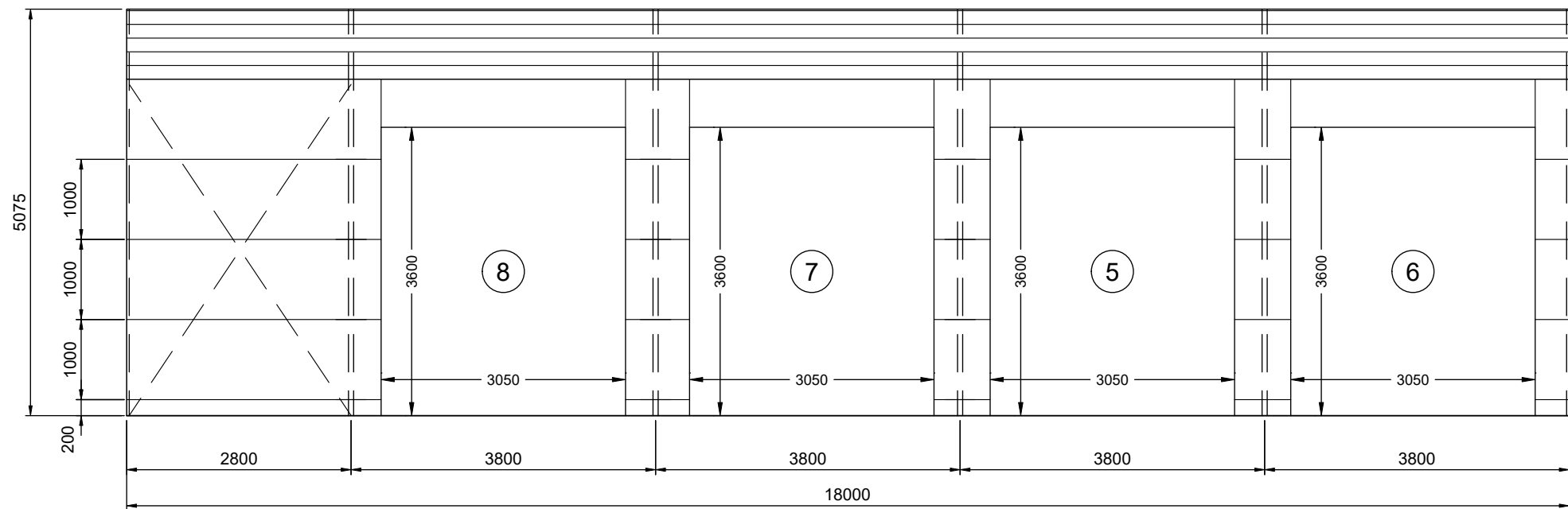
1 REAR ELEVATION  
3 SCALE: 1:75 FRAME #6



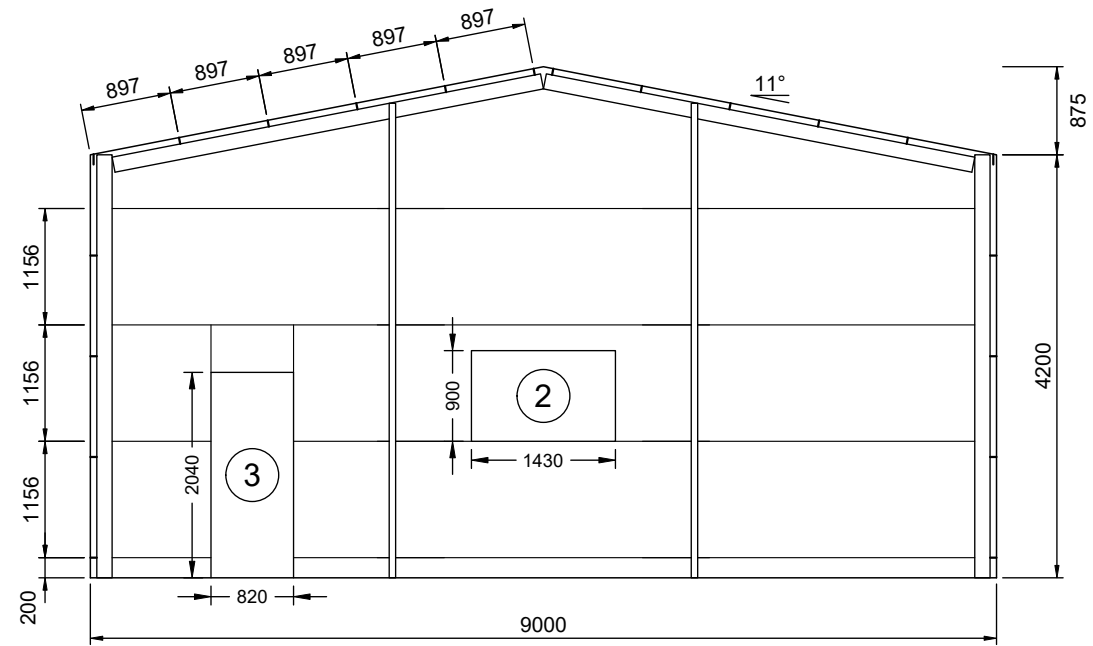
2 FRONT ELEVATION  
3 SCALE: 1:75 FRAME #1



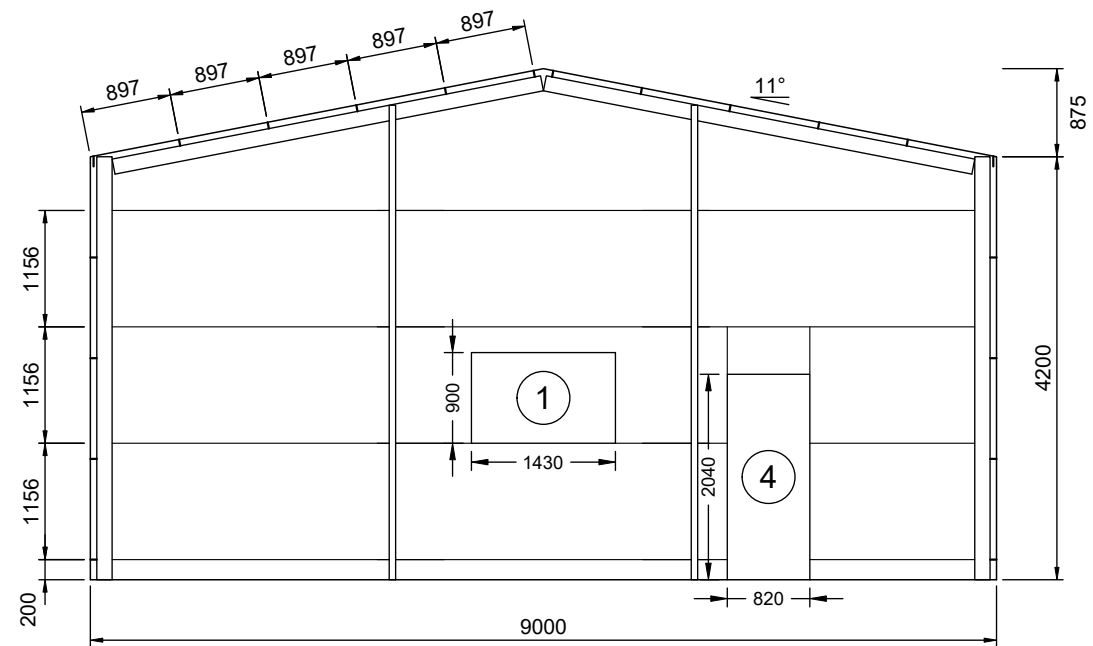
2 LEFT ELEVATION  
4 SCALE: 1:75



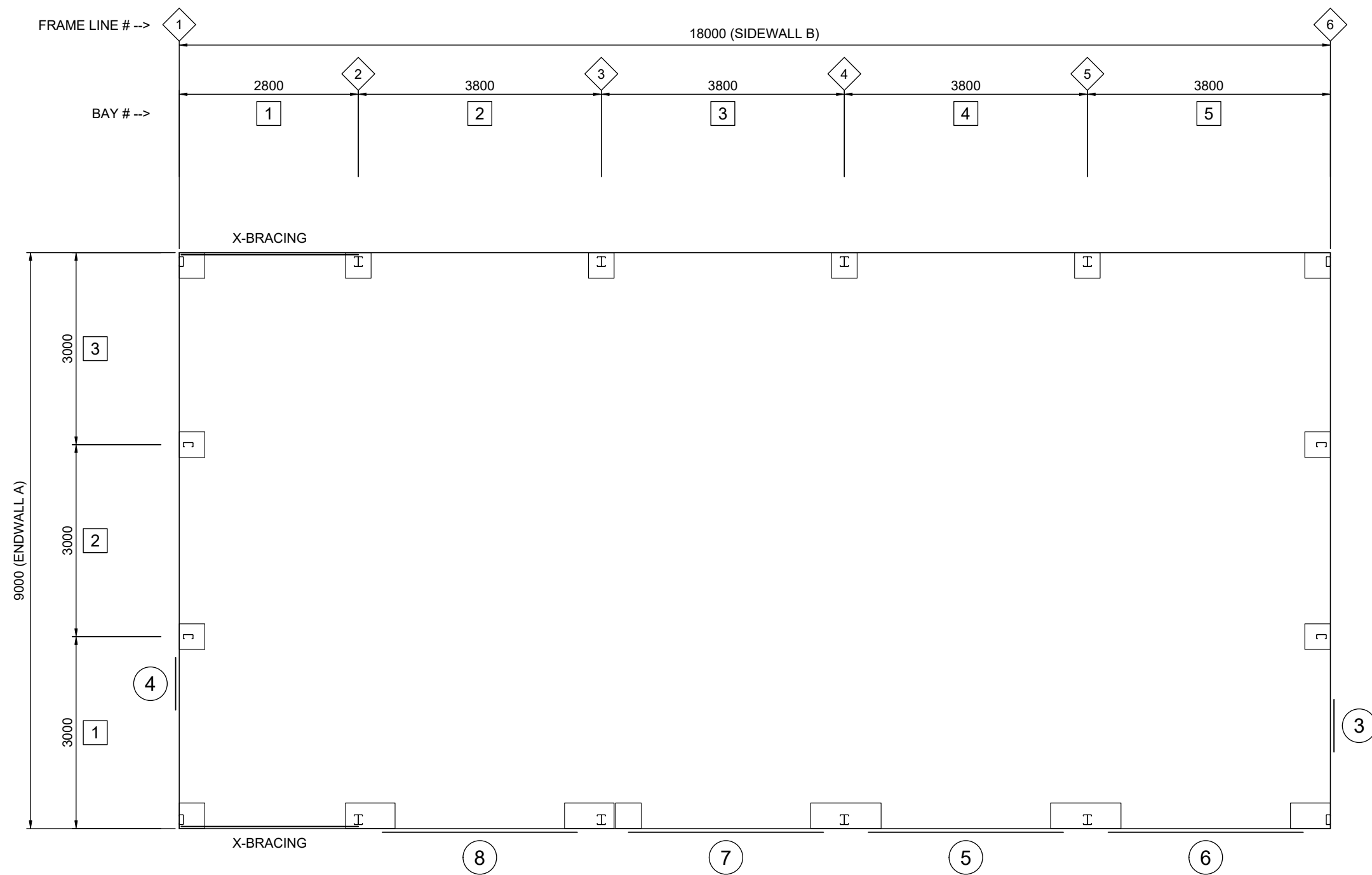
1 RIGHT ELEVATION  
4 SCALE: 1:75



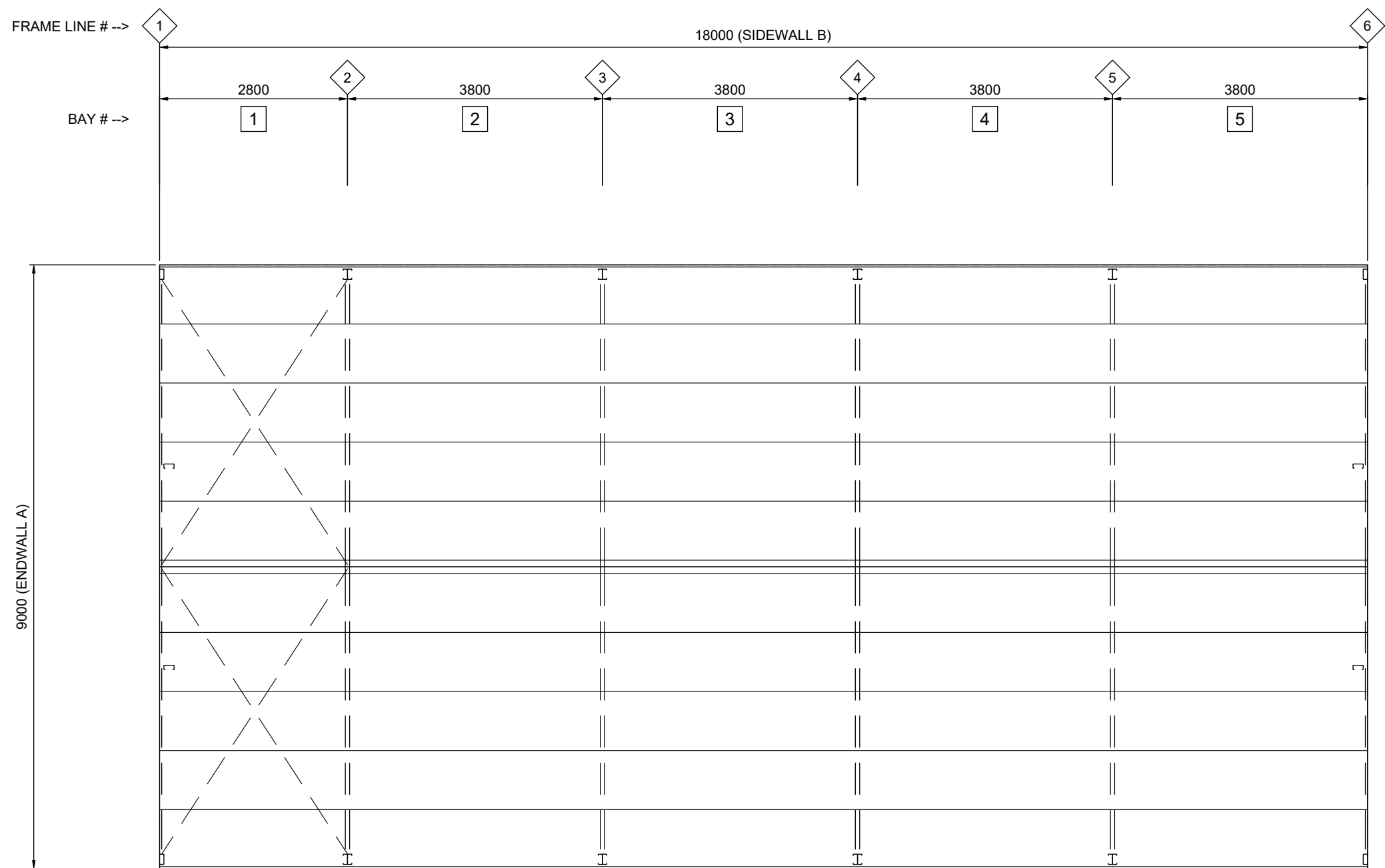
1 REAR ELEVATION  
5 SCALE: 1:75 FRAME #6



2 FRONT ELEVATION  
5 SCALE: 1:75 FRAME #1



1 FLOOR PLAN  
6 SCALE: 1:75



1 ROOF FRAMING PLAN

7

SCALE: 1:75

SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL  
(100mm MINIMUM CONCRETE 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

2 x M12 BOLTS

2 X 12MM DIA SLEEVE ANCHORS,  
10MM DIA INTERNAL ROD-MIN 75MM LONG

REFER TO SLAB  
TABLE FOR MESH  
TYPE - 30MM COVER

POLYTHENE WATERPROOF  
MEMBRANE ON CONSOLIDATED  
SUB-BASE SHOWN DASHED

DEPTH

WIDTH

100

Z

ALTERNATE PIER DETAIL

2C15024 COLUMN

NOTE:  
ENSURE EARTH/SOIL  
IS KEPT CLEAR OF  
WALL CLADDING AT  
ALL TIMES.

900

450

I

ROOF SHEETING

12g x14 x 35mm LONG ROOF SCREWS

RIDGE PURLIN  
(EVERY SECOND SCREW TO GO THROUGH THE RIDGE  
CAPPING AND ROOF SHEETING AND INTO THE RIDGE PURLIN)

INTERMEDIATE PURLIN

EAVE PURLIN

0.42 BMT CORRUGATED ROOF SHEETING

J

WALL SHEETING

10g x 16mm LONG WALL SCREWS

WALL GIRT

EAVE PURLIN

0.42 BMT CORRUGATED WALL SHEETING

Y

SLAB DETAIL

INDICATES 12 mmø  
GRADE 4.6 BOLT

2C15024 FRAME  
RAFTER

4 X 14G TEK SCREWS

2C15024 FRAME  
COLUMN

DBL. 1.9mm 11" HAUNCH  
BRACKET (SAME DEPTH  
AS MEMBERS)

(2) 12 mmø GRADE 4.6  
BOLTS AT EACH END  
OF KNEE BRACE

NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.

2C10010 KNEE  
BRACE, 1600 mm  
LONG (OMIT AT  
ENDWALLS)

3539 mm  
TO TOP OF  
CONCRETE  
FOUNDATION

F

GIRT CONNECTION

2C15024 FRAME  
RAFTER

DBL. 1.9mm 11" APEX  
BRACKET, WITH (8) 12 mmø  
GRADE 4.6 BOLTS PER  
BRACKET

4 X 14G TEK SCREWS

1950 mm

(2) 12 mmø GRADE 4.6 BOLTS AT  
EACH END OF APEX BRACE

2C10010 APEX BRACE  
(OMIT AT ENDWALLS), 4000  
mm LONG

NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.

G

TOP HAT CONNECTION

C15024 ENDWALL  
RAFTER

NOTE: SEE DETAIL M/9 FOR  
BASE CONNECTION OF  
ENDWALL MULLION.

ATTACH WEB OF ENDWALL RAFTER  
TO OUTSIDE FLANGE OF ENDWALL  
MULLION WITH 6 X 14G TEK SCREWS

C15024 (OPEN SIDE OF CEE MAY FACE  
EITHER DIRECTION, U.N.O.)

H

EAVE CONNECTION

TOPHAT 64 ROOF  
PURLIN WITH 10%  
MINIMUM OVERLAP

12G X 35MM SHEETING  
SCREW, REFER TO SCREW  
SPACING DIAGRAM FOR  
FREQUENCY

C15024 RAFTER

4 X 14G TEK  
SCREW

A

HAUNCH CONNECTION

B

APEX CONNECTION

C

ENDWALL MULLION TO RAFTER

E

PURLIN CONNECTION

best  
sheds

Value & Quality Direct to You

151 Smeaton Grange Road,  
Smeaton Grange, NSW, 2567  
Phone: 02 4648 7777  
Fax: 02 4648 7700  
Email: sales@bestsheds.com.au

EMERALD

DESIGN & CONSTRUCTION

CIVIL & STRUCTURAL ENGINEERS

COMMERCIAL - INDUSTRIAL - RESIDENTIAL - FORENSIC - STEEL DETAILING

CAMILO PINEDA MORENO

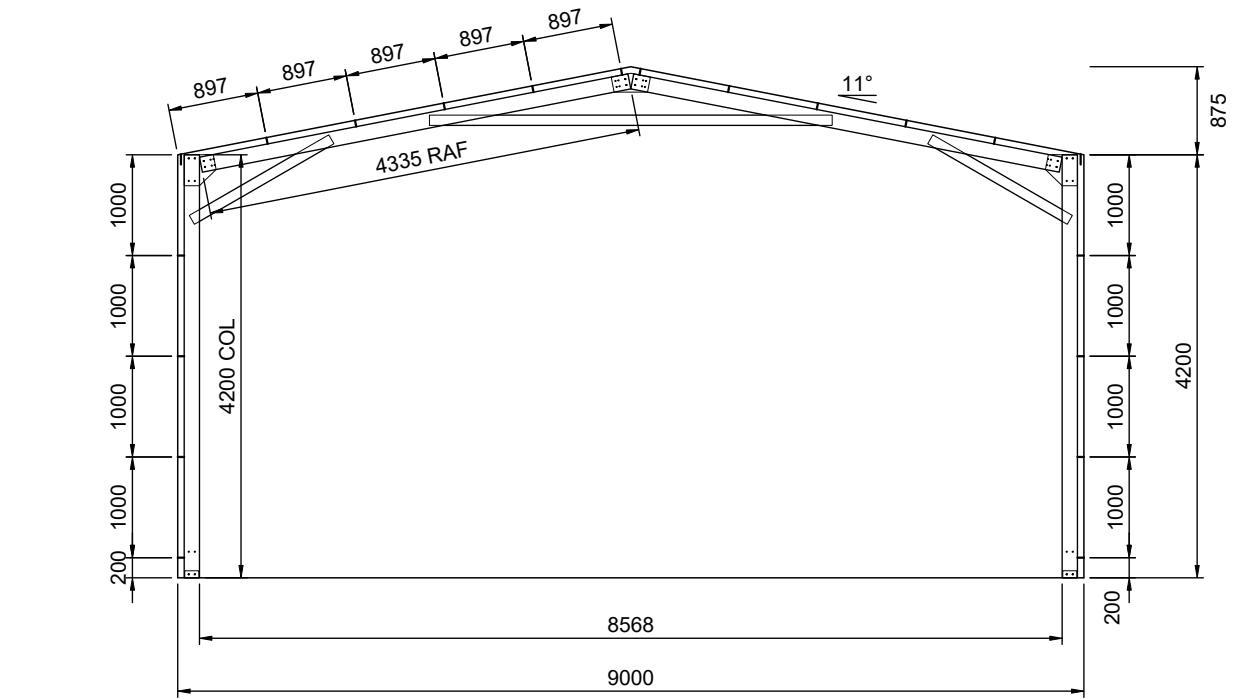
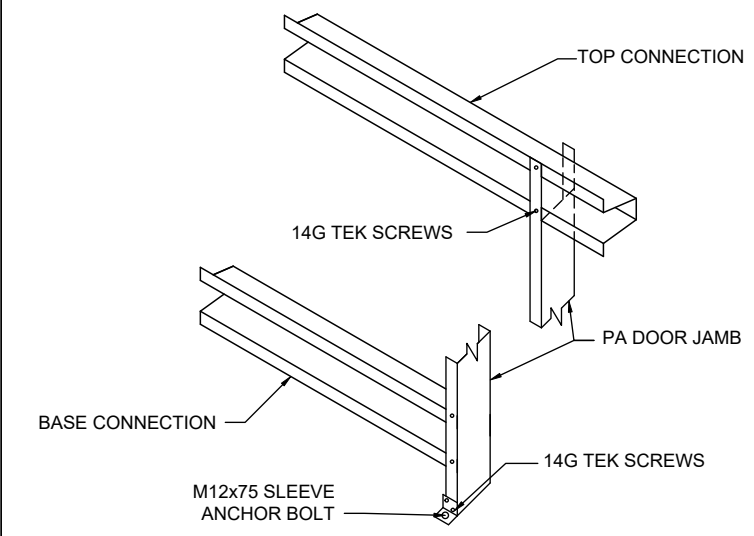
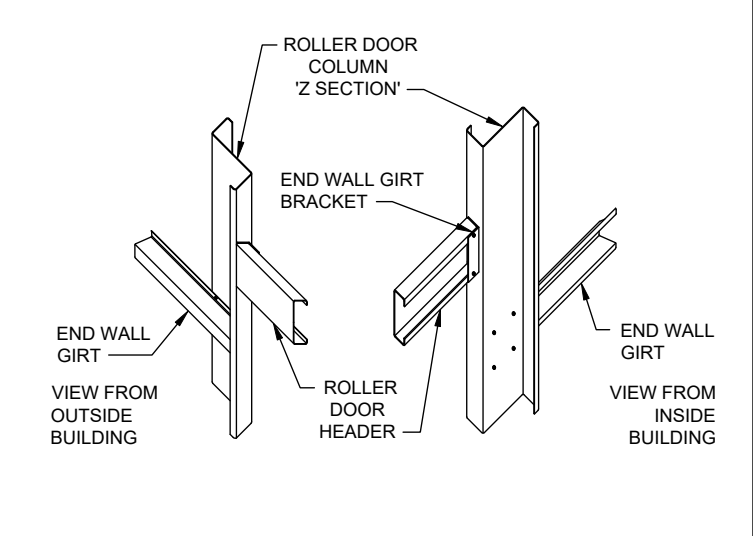
Bend MIEAust RPEng  
RPEQ 15562 TBP PE003976 (VIC)

Signature:

Date: 17.01.2025

Customer Name: Darren Moyeses  
Site Address: 4 Supreme Wy  
Nemingah,  
NSW, 2340

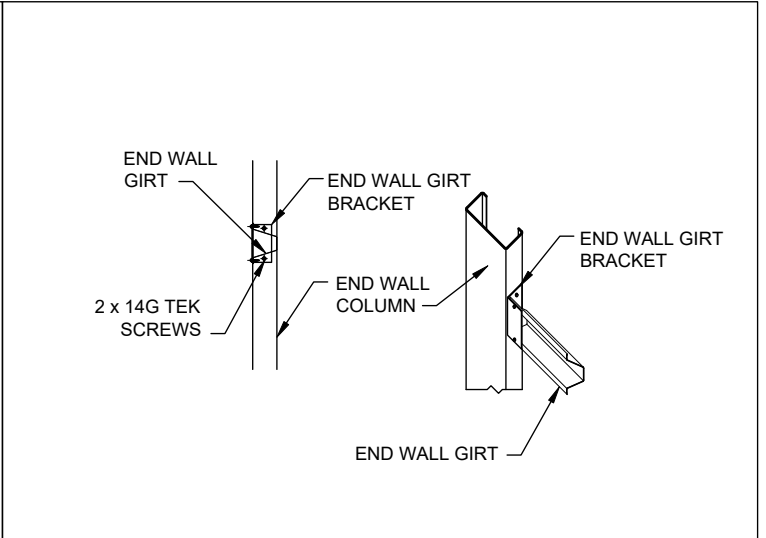
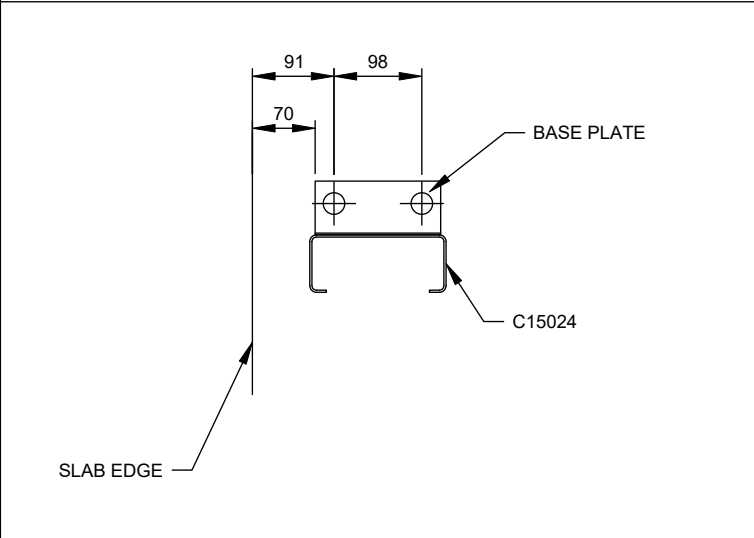
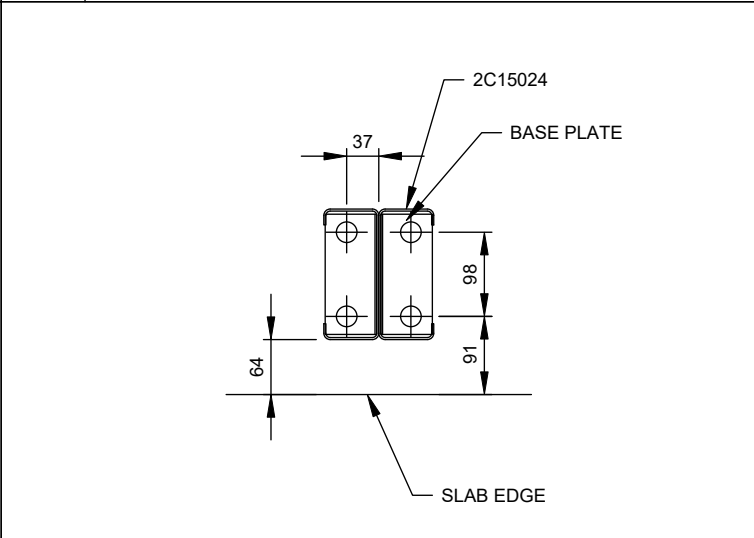
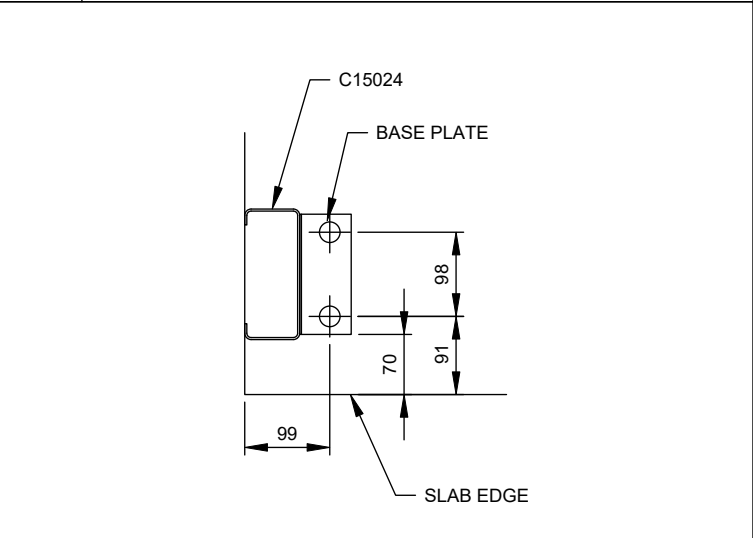
DATE 17-01-2025  
JOB NO. 5699280464  
SHEET 8 of 9



**1** TYP. FRAME CROSS-SECTION  
**9** SCALE: 1:75 FRAMES 2-5

**O** SIDE DOOR HEADER AND JAMB

**P** PA DOOR STYLE CONNECTION



**K** CORNER COLUMN BASE

**L** INTERNAL COLUMN BASE

**M** ENDWALL MULLION BASE

**N** ENDWALL GIRT BRACKET