

ENGINEERING SCHEDULE

CERTIFIED STEEL PORTAL FRAME SHED DESIGN IN ACCORDANCE WITH NCC 2022 FOR SITE WIND SPEED "41.57m/s" , WIND REGION "A0", TERRAIN CATEGORY "3", IMPORTANCE LEVEL "2"

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

Customer: A.Warwicker Pty Ltd
Site Address: 20 Queen St, Gulgong NSW 2852

Main Building: Span: 9, Length: 10, Height: 3.5, Roof Pitch: 11 degrees
The length being comprised of 4 bays, the largest bay is 3.75m bays.
Back Garaport: Span: 9, Length: 3, Height: 3.5
Left LeanTo: NA
Right LeanTo: NA

Total Kit Weight: 3130.75kg

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 Front End Wall Girts: TH64100 Back End Wall Girts: TH64100 Roof Purlins: TH64100	Max Spacing: 1250 Max Spacing: 1250 Max Spacing: 1250 Max Spacing: 1000	Overlap: 10% Overlap: 10% Overlap: 10% 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: Heritage Red External Wall Sheets: Smooth Cream Roller Doors: Heritage Red Flashings: Heritage Red PA Doors: Smooth Cream Windows: Heritage Red

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.

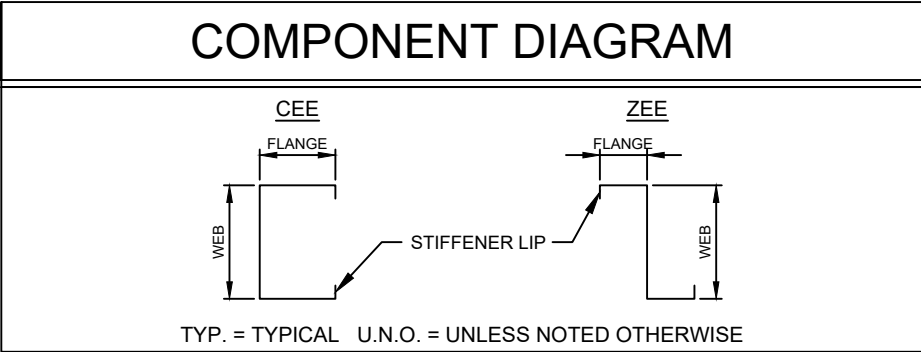
GENERAL

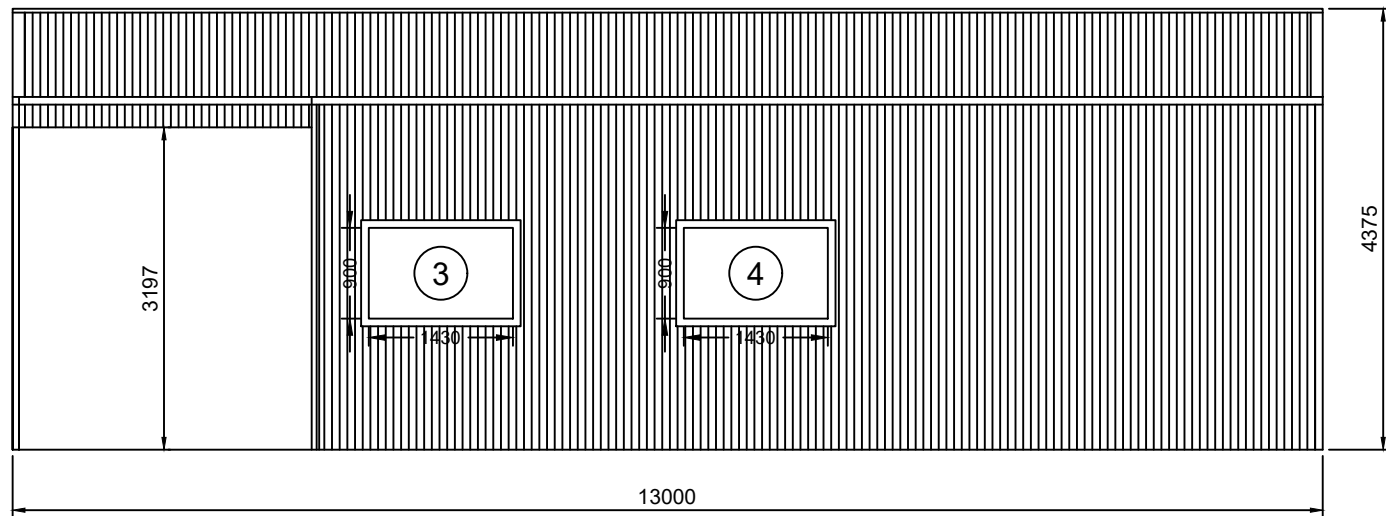
The designs as portrayed on the drawings remain the intellectual property of Best Sheds Pty Ltd and are provided for building approval and construction purposes only.

SNOW LOAD

Following conditions only apply to buildings with snow loading:

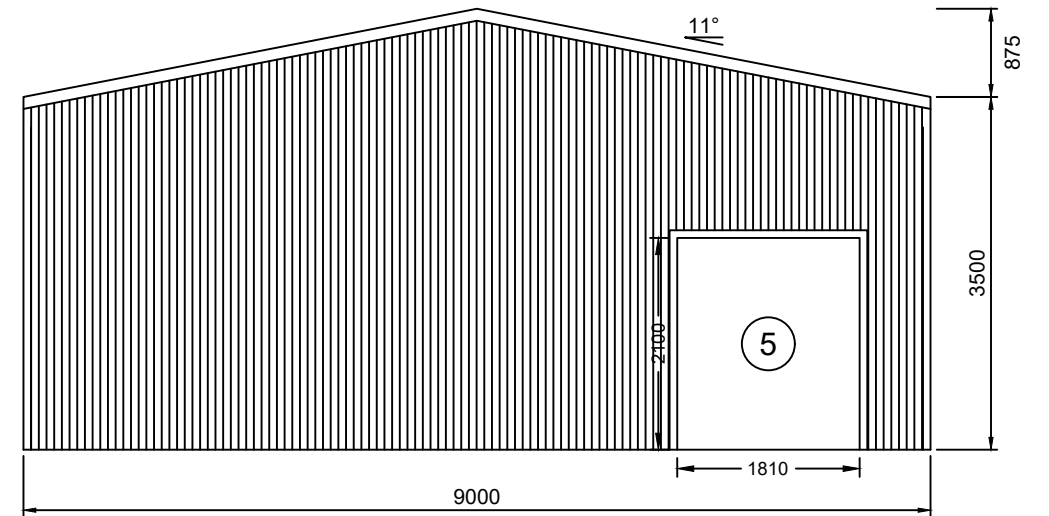
- No maintenance or roof traffic permitted on the roof while there is snow present.
- No other structure to be erected within 500mm of the gutters of this building.





2 LEFT ELEVATION

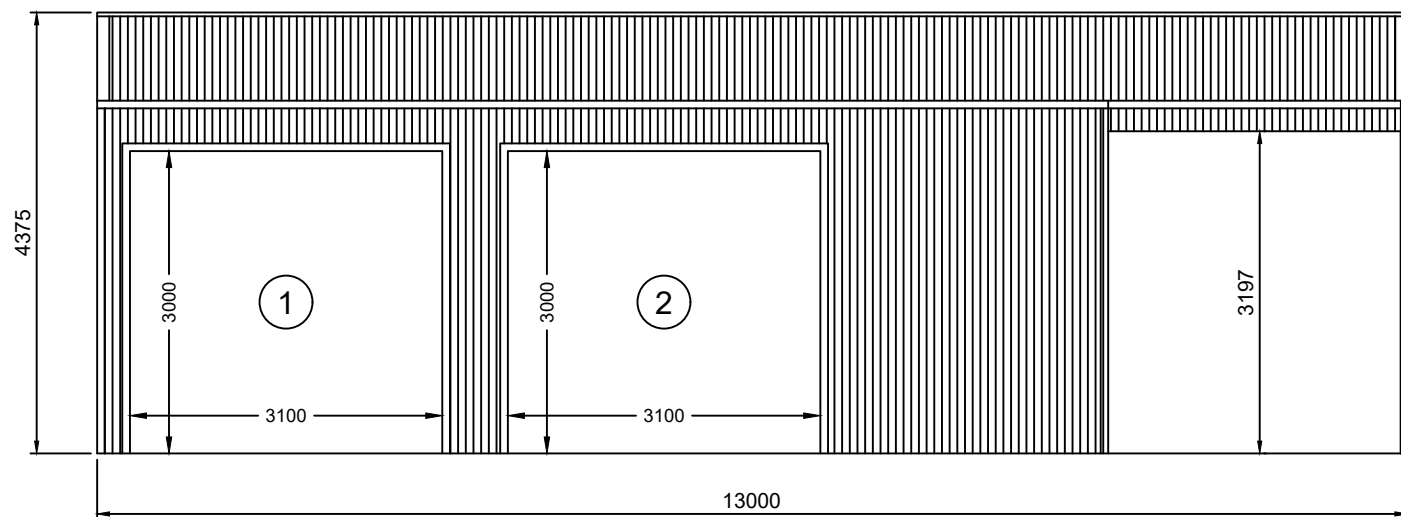
SCALE: 1:75



3 REAR ELEVATION

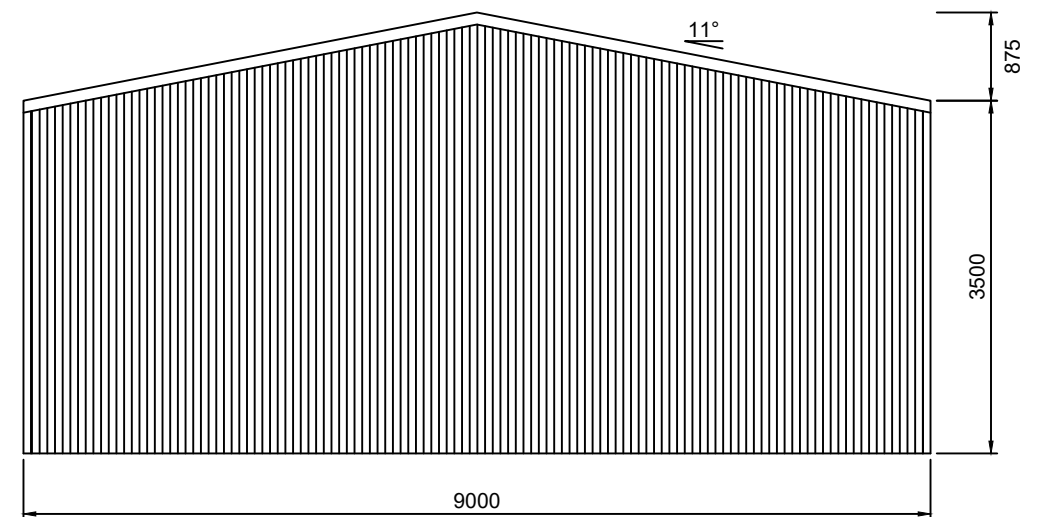
SCALE: 1:75

FRAME #4



1 RIGHT ELEVATION

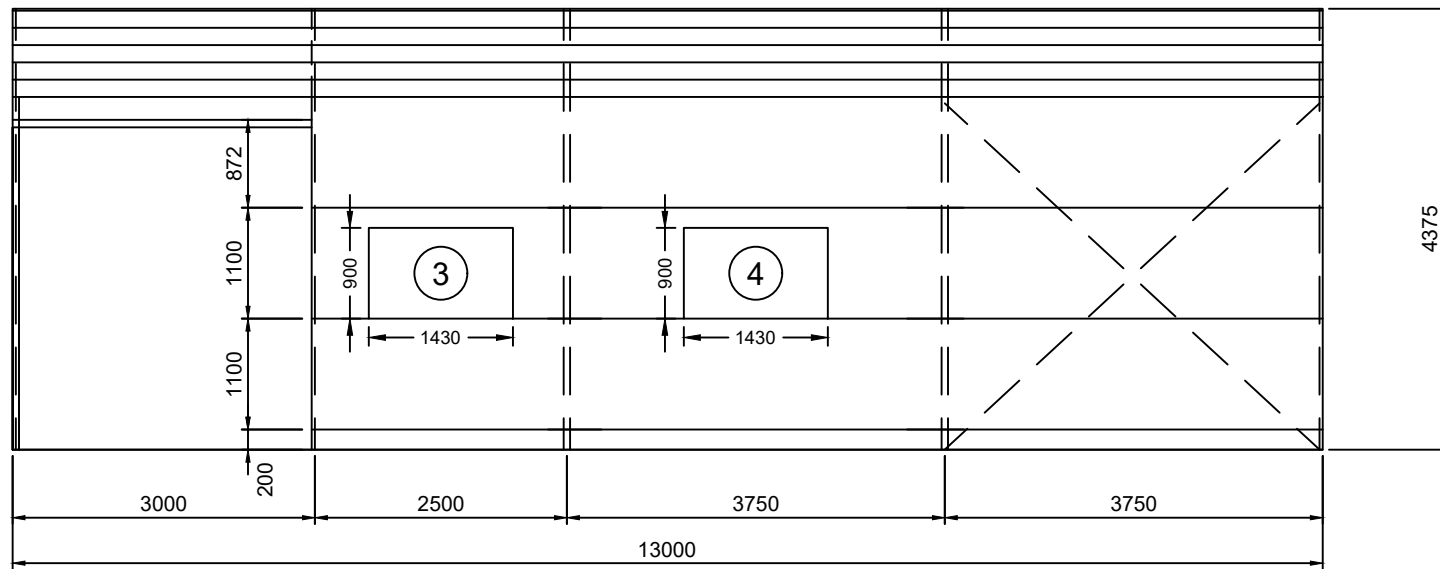
SCALE: 1:75



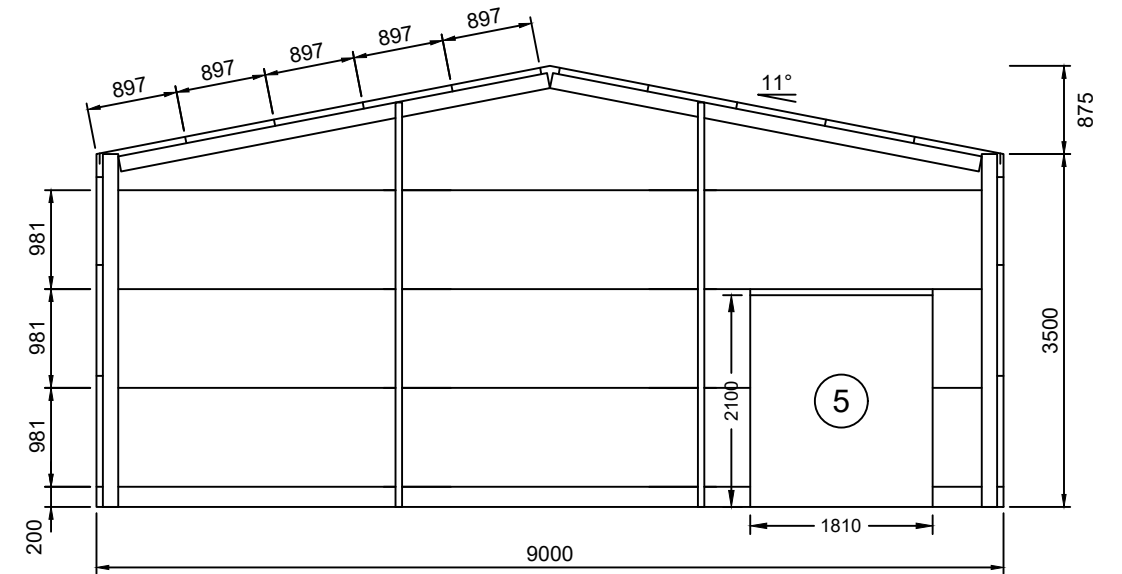
4 FRONT ELEVATION

SCALE: 1:75

FRAME #1

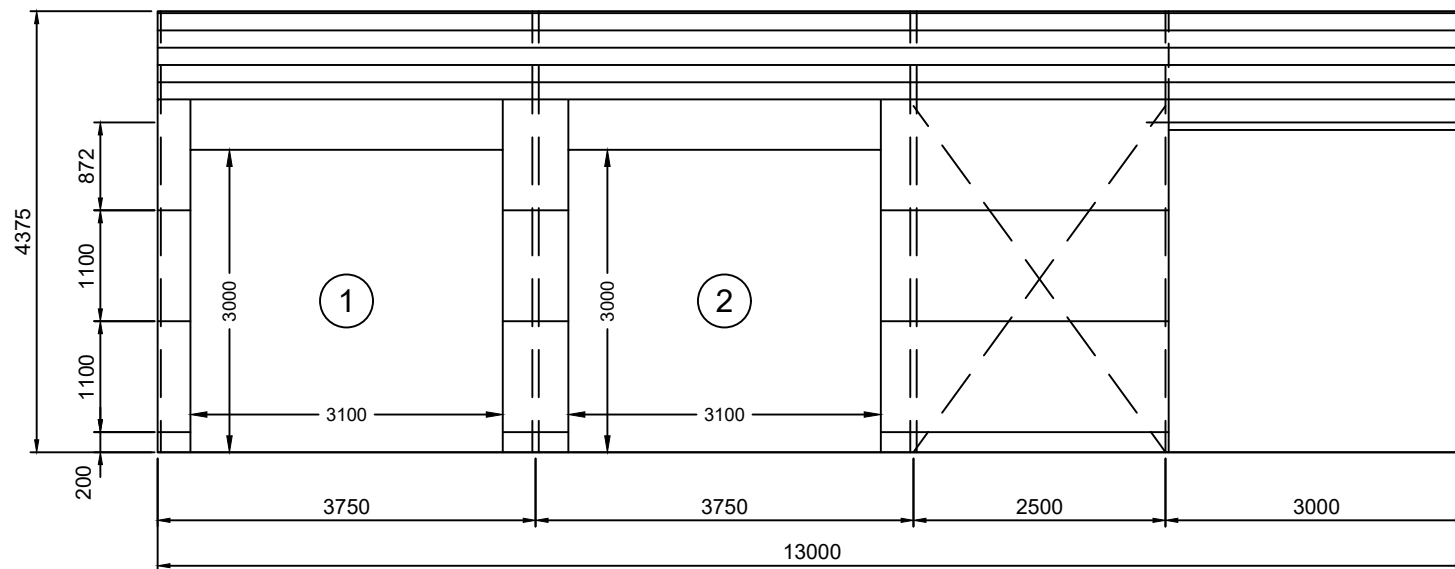


2 LEFT ELEVATION
3 SCALE: 1:75

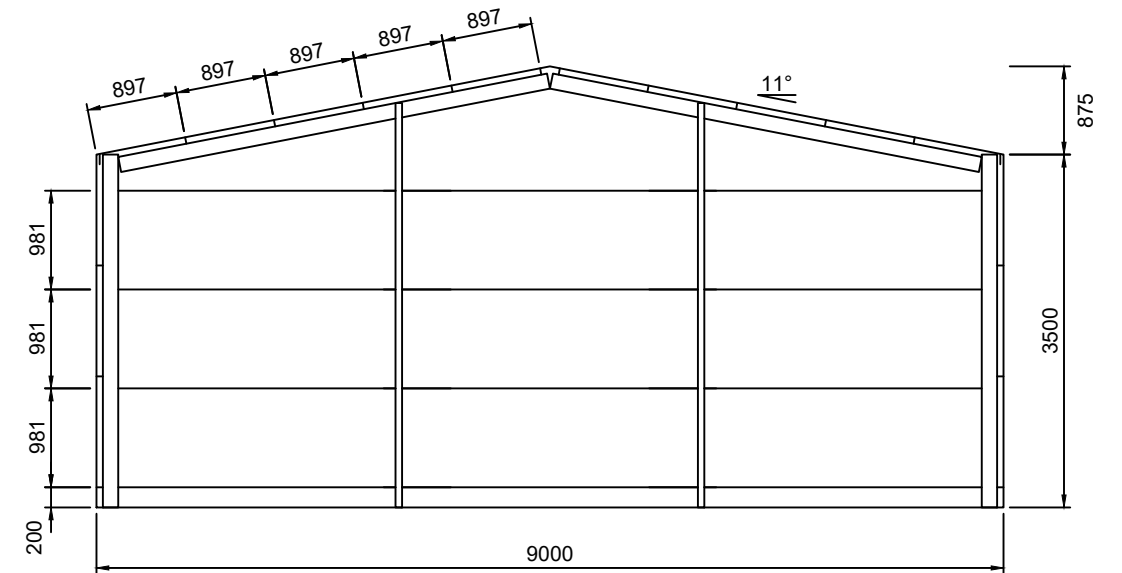


3 REAR ELEVATION
3 SCALE: 1:75

FRAME #4

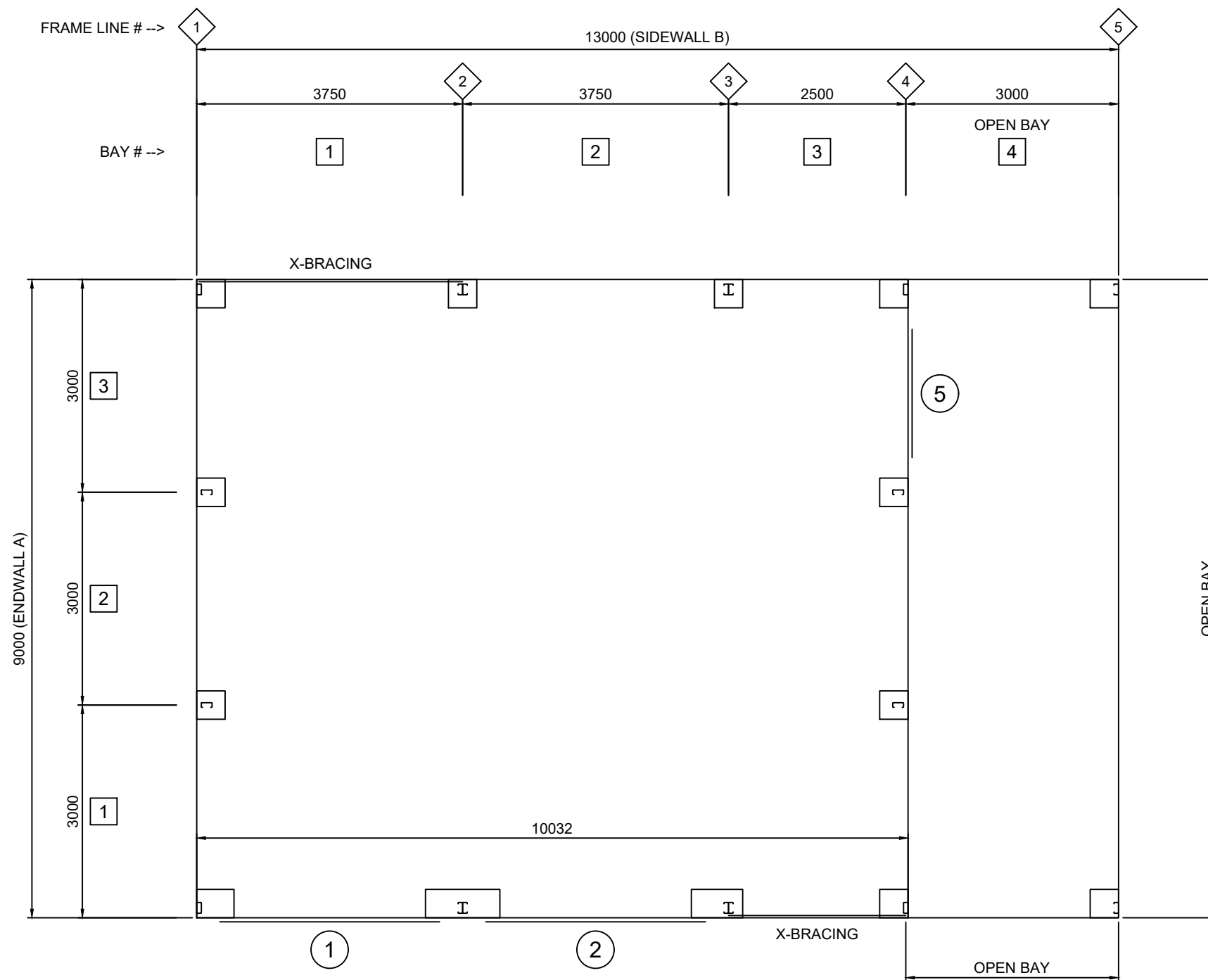


1 RIGHT ELEVATION
3 SCALE: 1:75

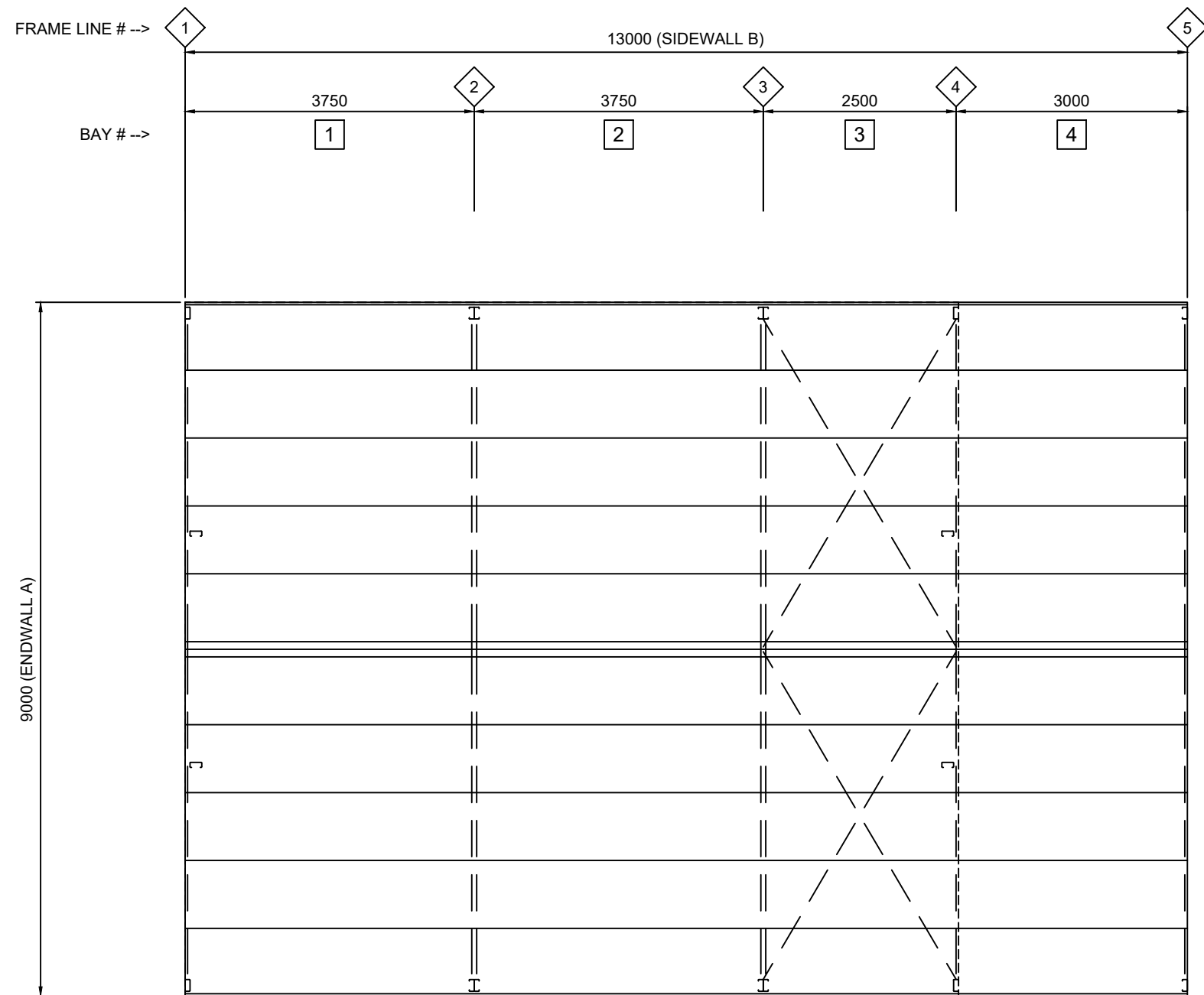


4 FRONT ELEVATION
3 SCALE: 1:75

FRAME #1



1 FLOOR PLAN
4 SCALE: 1:75



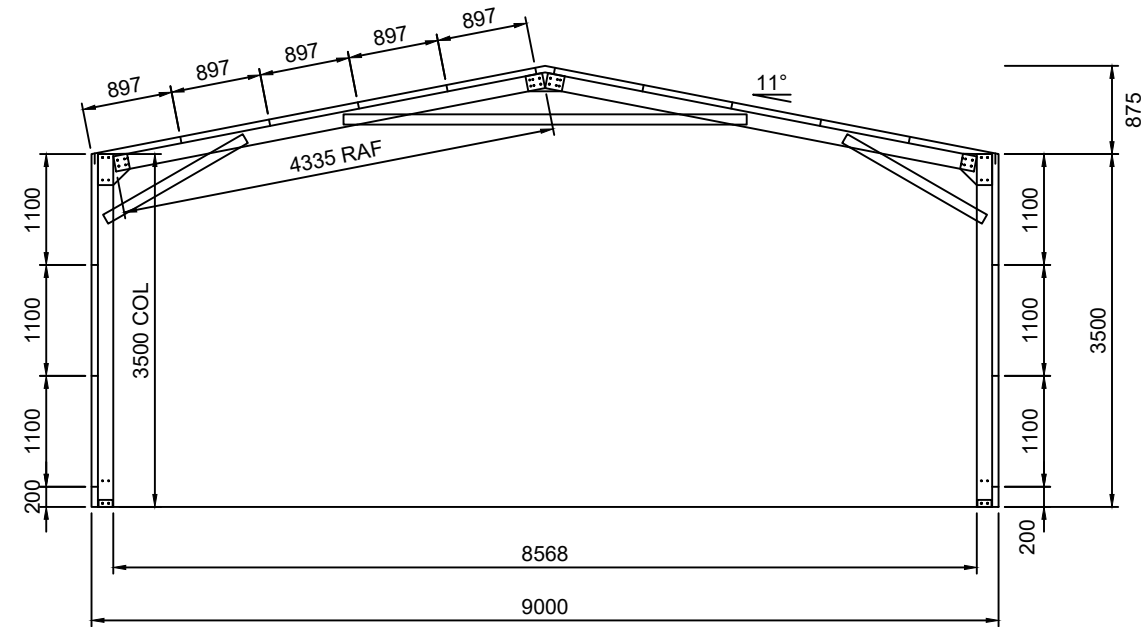
1 ROOF FRAMING PLAN

5

SCALE: 1:75

<div>SLAB FOUNDATIONS DOMESTIC / LIGHT INDUSTRIAL (100mm MINIMUM CONCRETE SLAB INCLUDED)</div> <table><tr><th>SOIL CLASSIFICATION (COMPACTED)</th><th>REINFORCING IN SLAB</th><th>EDGE BEAM</th><th>PIER</th><th colspan="2">EDGE BEAM (slab thickness not included)</th></tr><tr><th></th><th>MESH REINFORCING</th><th>TRENCH MESH</th><th>ø x DEPTH</th><th>DEPTH</th><th>WIDTH</th></tr><tr><td>A, S, & M</td><td>SL72</td><td>---</td><td>450 x 400</td><td>---</td><td>---</td></tr><tr><td>M - D</td><td>SL82</td><td>L11TM3</td><td>---</td><td>300</td><td>300</td></tr><tr><td>H TO H - D</td><td>SL82</td><td>L11TM3</td><td>---</td><td>400</td><td>300</td></tr><tr><td>E TO E - D</td><td>SL82</td><td>L11TM4</td><td>---</td><td>400</td><td>400</td></tr><tr><td>P (DROP EDGE BEAM OR STANDARD EDGE BEAM WITH PIERS UNDER COLUMNS 300 INTO FIRM GROUND)</td><td>SL82</td><td>L11TM4</td><td>450ø</td><td>400</td><td>400</td></tr></table> <div>THICKNESS: 100MM WITH MINIMUM 30MM COVER. REFER TO SLAB FOUNDATION TABLE FOR REINFORCING SPECIFICATION</div> <div>STRENGTH: 25mPa</div> <div><p>Diagram showing a cross-section of a slab foundation. It includes labels for 'DEPTH' and 'WIDTH'. A note indicates 'REFER TO SLAB TABLE FOR MESH TYPE - 30MM COVER'. A dashed line represents the 'POLYTHENE WATERPROOF MEMBRANE ON CONSOLIDATED SUB-BASE SHOWN DASHED'. A dimension of '100' is shown for the slab thickness.</p></div>						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	<div><p>Diagram showing an alternate pier detail. It includes a note: 'NOTE: ENSURE EARTH/SOIL IS KEPT CLEAR OF WALL CLADDING AT ALL TIMES.' Dimensions of '900' and '450' are shown. A label '2C15024 COLUMN' is present.</p></div> <div>ZALTERNATE PIER DETAIL</div>		<div><p>Diagram showing roof sheeting details. It includes labels for '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', and '0.42 BMT CORRUGATED ROOF SHEETING'.</p></div> <div>IROOF SHEETING</div>		<div><p>Diagram showing wall sheeting details. It includes labels for '10g x 16mm LONG WALL SCREWS', 'WALL GIRT', 'EAVE PURLIN', and '0.42 BMT CORRUGATED WALL SHEETING'.</p></div> <div>JWALL SHEETING</div>	
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<div><p>Diagram showing a slab detail. It includes labels for '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', and 'WIDTH'. A dimension of '100' is shown.</p></div> <div>YSLAB DETAIL</div>		<div><p>Diagram showing a girt connection. It includes labels for '10G X 16MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY', 'TOPHAT 64 WALL GIRT WITH 10%MM MINIMUM OVERLAP', '2 X 14G TEK SCREWS', and '2C15024 COLUMN'.</p></div> <div>FGIRT CONNECTION</div>		<div><p>Diagram showing a top hat connection. It includes labels for '2 x 14G TEK SCREWS ABOVE & BELOW IN SIDE OF PURLIN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL', '2 x 14G TEK SCREWS PER COLUMN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL', and '2 x 14G TEK SCREWS ABOVE & BELOW IN SIDE OF PURLIN - UNDERSIDE SCREW NOT VISIBLE IN DETAIL'.</p></div> <div>GTOP HAT CONNECTION</div>		<div><p>Diagram showing an eave connection. It includes labels for '12G X 35MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY', '2 x 14G TEK SCREWS', 'SHEETING', 'C10010', and 'C15024 COLUMN'.</p></div> <div>HEAVE CONNECTION</div>																																															
<div><p>Diagram showing a haunch connection. It includes labels for 'INDICATES 12 mmø GRADE 4.6 BOLT', '4 X 14G TEK SCREWS', '2C15024 FRAME RAFTER', '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', '2C10010 KNEE BRACE, 1600 mm LONG (OMIT AT ENDWALLS)', '2839 mm TO TOP OF CONCRETE FOUNDATION', and 'NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.'.</p></div> <div>AHAUNCH CONNECTION</div>		<div><p>Diagram showing an apex connection. It includes labels for '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', and '2C10010 APEX BRACE (OMIT AT ENDWALLS), 4000 mm LONG'. A note states: 'NOTE: ALL DOUBLE COMPONENTS SHALL BE SINGLE AT ENDWALLS.'.</p></div> <div>BAPEX CONNECTION</div>		<div><p>Diagram showing an endwall mullion to rafter connection. It includes labels for 'C15024 ENDWALL RAFTER', 'NOTE: SEE DETAIL N/7 FOR BASE CONNECTION OF ENDWALL MULLION.', 'ATTACH WEB OF ENDWALL RAFTER TO OUTSIDE FLANGE OF ENDWALL MULLION WITH 6 X 14G TEK SCREWS', and 'C15024 (OPEN SIDE OF CEE MAY FACE EITHER DIRECTION, U.N.O.)'.</p></div> <div>CENDWALL MULLION TO RAFTER</div>		<div><p>Diagram showing a purlin connection. It includes labels for 'TOPHAT 64 ROOF PURLIN WITH 10% MINIMUM OVERLAP', '12G X 35MM SHEETING SCREW, REFER TO SCREW SPACING DIAGRAM FOR FREQUENCY', 'C15024 RAFTER', and '4 X 14G TEK SCREW'.</p></div> <div>EPURLIN CONNECTION</div>																																															

O	P	Q	
K	L	M	N
CORNER COLUMN BASE	INTERNAL COLUMN BASE	ROOF ONLY COLUMN BASE	ENDWALL MULLION BASE



1
8 TYP. FRAME CROSS-SECTION
SCALE: 1:75 FRAMES 2, 3, 5