

IMPORTANT: IN ADDITION TO THESE PLANS (WHICH ALWAYS TAKE PRECEDENCE), YOU SHOULD HAVE THE FOLLOWING FROM ACT BUILDING SYSTEMS:

- CONSTRUCTION PACKAGE
- INSTALLATION MANUALS
- CONSTRUCTION VIDEOS

PLEASE CONTACT YOUR SALES REP IF YOU HAVE NOT RECEIVED THESE PRIOR TO STARTING CONSTRUCTION.

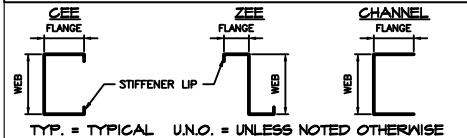
PROJECT DESIGN CRITERIA

GOVERNING CODE: IBC 2018
RISK CATEGORY: II
ROOF DEAD LOAD: 3 psf
ROOF COLLATERAL LOAD: 2 psf
GROUND SNOW LOAD: 50 psf
ROOF SNOW LOAD: 35 psf
ROOF LIVE LOAD: 20 psf (REDUCIBLE)
WIND ENCLOSURE: ENCLOSED
WIND SPEED: 106 mph
WIND EXPOSURE: C
Ss: 0.083
Sl: 0.046
SEISMIC DESIGN CATEGORY: B
R transverse: 3
R longitudinal: 3
SOIL BEARING PRESSURE: 1500 psf

WIND DESIGN OF LATERAL FORCE-RESISTING SYSTEMS IS BASED ON THE DIRECTIONAL DESIGN PROCEDURE OF ASCE 7-16, CHAPTER 27.

SEISMIC DESIGN OF LATERAL FORCE-RESISTING SYSTEMS ARE AS FOLLOWS:
-- TRANSVERSE: ORDINARY STEEL MOMENT FRAME (SEISMIC DESIGN IS BASED ON ASCE 7-16, SECTIONS 12.1 - 12.13)
-- LONGITUDINAL: ORDINARY STEEL BRACED FRAME (SEISMIC DESIGN IS PERFORMED USING THE SIMPLIFIED DESIGN PROCEDURE (ASCE 7-16, SECTION 12.14)).

COMPONENT DIAGRAM



WALL OPENING SCHEDULE

DOOR	WIDTH	HEIGHT	TYPE	HEADER GIRTS	JAMBS
1-2	8'-0"	10'-0"	SECTIONAL DOOR	SEE NOTE #4	C4X2.5 X16
3	3'-4"	7'-4"	PERSONNEL DOOR	SINGLE	CHN4X 2X16
4	3'-4"	7'-4"	PERSONNEL DOOR	SINGLE	---
5-7	3'-0"	4'-0"	WINDOW	SEE NOTE #4	C4X2.5 X16
8-9	3'-0"	4'-0"	WINDOW	SINGLE	C4X2.5 X16
10-13	3'-0"	4'-0"	WINDOW	SINGLE	CHN4X 2X16
14-15	3'-0"	4'-0"	WINDOW	SINGLE	CHN6X 2X14
16	2'-0"	2'-0"	WINDOW	SINGLE	C4X2.5 X16
17	2'-0"	2'-0"	WINDOW	SINGLE	CHN4X 2X16
18	2'-0"	2'-0"	WINDOW	SINGLE	CHN6X 2X14

NOTES:
1) JAMB MEMBERS SHOWN AS "CHN" ARE CHANNEL MEMBERS (WITHOUT STIFFENER LIPS) AND THOSE SHOWN AS "C" ARE CEE MEMBERS. FIRST NUMBER IS WEB DEPTH IN INCHES, SECOND NUMBER IS FLANGE WIDTH IN INCHES, AND THIRD NUMBER IS MATERIAL THICKNESS (GAUGE).
2) SEE DETAILS J/B AND K/B FOR OPENING FRAMING INFORMATION.
3) SIZE OF HEADER GIRTS MEMBER TO BE SAME AS SIDEWALL OR ENDWALL GIRTS, AS APPROPRIATE, PER ELEVATIONS. AT WINDOWS, INSTALL HEADER GIRTS SPECIFIED ABOVE AND BELOW WINDOWS, U.N.O.
4) AT OPENINGS NOTED, INSTEAD OF ATTACHING DOOR JAMBS TO HEADER GIRTS PER DETAIL L1/B ATTACH DOOR JAMBS TO UNDERSIDE OF EAVE PURLIN PER DETAIL L2/B.
5) ALL OPENINGS AND ACCESSORIES SHALL BE CAPABLE OF SUPPORTING ALL WIND PRESSURES PERPENDICULAR TO THE SURFACE (GENERATED BY WINDS AT THE SPEED AND EXPOSURE INDICATED ABOVE) BY SPANNING BETWEEN THE JAMBS.

DEFLECTION LIMITS

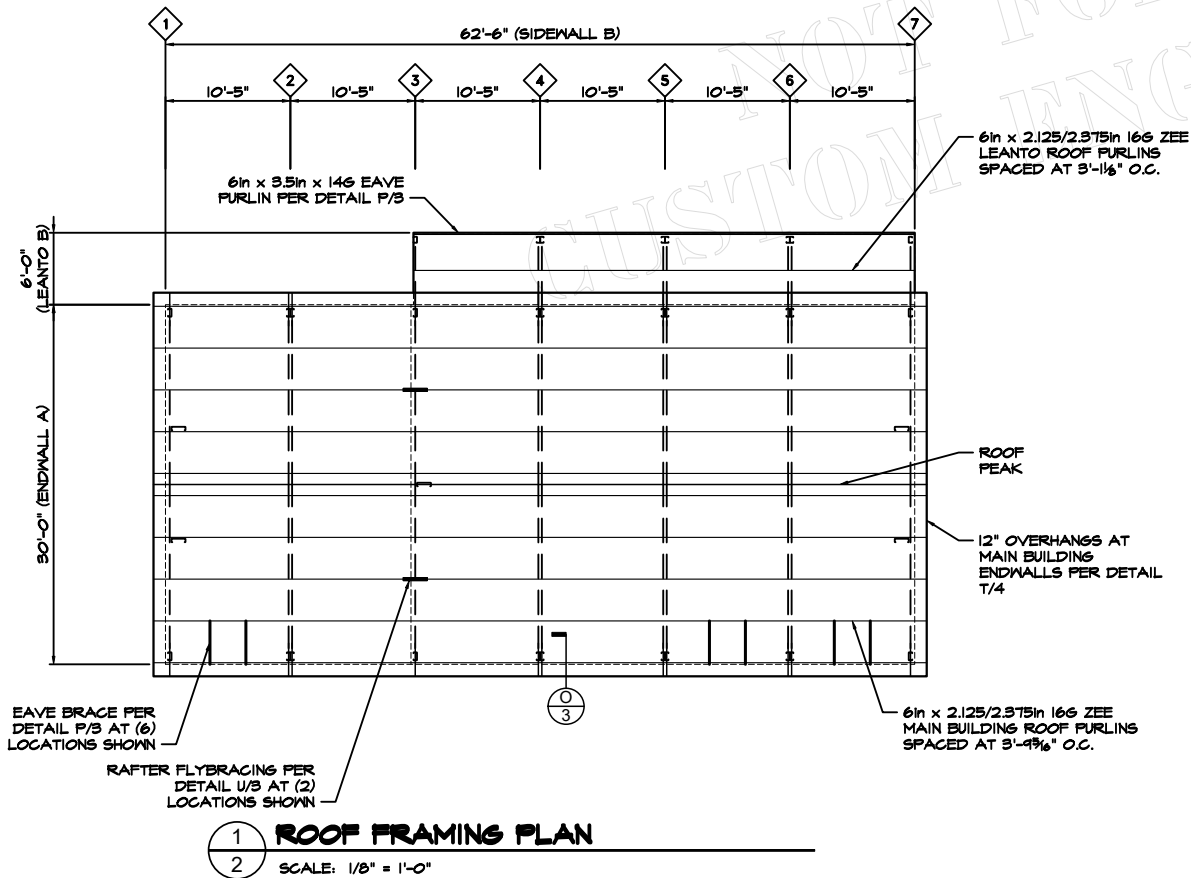
PORTAL FRAME (HORIZ):	L/100 (BRN)
PORTAL FRAME (VERT):	L/240 (BRN)
PURLINS:	L/240 (BRN)
GIRTS:	L/240 (BRN)
EW WIND COLUMNS:	L/240 (BRN)
WALL PANEL:	L/240 (BRN)

PRELIMINARY
ONLY NOT FOR
CONSTRUCTION



DISTRIBUTOR:
Toro Steel Buildings
30x62 shop house
801 Broadway avenue nw
Grand Rapids, MI 49504

DRAWN
CHECKED
DATE
8/20/2025
JOB NO.
VNUJ98779926
SHEET
1
OF
2



PRELIMINARY ONLY
NOT FOR CONSTRUCTION
CUSTOMER ENGINEERING REQUIRED



ACTBUILDING
SYSTEMS®

DISTRIBUTOR: Toro Steel Buildings
JOB NAME: 30x62 shop house
JOB ADDRESS: 801 Broadway avenue nw
Grand Rapids, MI 49504

DRAWN

CHECKED

DATE

8/20/2025

JOB NO.

VNUJ98779926

SHEET

2

OF

2

PRELIMINARY
ONLY NOT FOR
CONSTRUCTION

Robertson™
BUILDING SYSTEMS

Part of the Cornerstone Building Brands Family

TABLE OF CONTENTS

Building Layout Plan	2
Anchor Bolt Details	3
Portal Frame Sections	6
Roof Framing Plan	14
Girt Layout	16
Sheeting Layout	22

CONSTRUCTION PACKAGE NOTES

This construction package is to be used in conjunction with the created order for the job. All lengths and piece marks of materials in this package will correspond to an item in the order. For example, on the Sidewall A girt layout, there will likely be an item with a piece mark of SGA1. This will correspond to a line item in the order with the piece mark of SGA1. Products that do not include a piece mark will be marked with the product code.

All girt layout and sheeting layouts drawings in this construction package are exterior views, and in these illustrations, components are drawn as if viewed from the outside of the building.

All drawings in this construction package are for reference only, and are to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

CONSTRUCTION NOTIFICATIONS

The following items will require non-typical installation that will take extra time and care during the construction process. Please take precautions.

• Leanto Rafter Connector is used in this building configuration. Where the main building has wall sheeting installed under the leanto roof the leanto framing should not be installed until after the main building wall sheeting is installed. Please see your engineering plans and Appendix B – Leanto Rafter Installation for specific installation instructions and illustrations.

• Some opening headers in building do not match girt size in wall. In these cases standard header installation will not be possible and header will need to be rotated with web of header pointed to outside of building instead of pointing down.

• Some Items In order will need to be cut to length on site. Please see 'Notes' column In order for full list of Items to be cut and their lengths.

IMPORTANT

IN ADDITION TO THIS DOCUMENT, YOU SHOULD ALSO HAVE THE FOLLOWING BUILDING SPECIFIC DOCUMENTS FROM YOUR BUILDING REPRESENTATIVE:

- ENGINEERING PLAN
- COPY OF THE ORDER

FOR MORE INFORMATION TO HELP MAKE COLD FORMED CONSTRUCTION EASIER, PLEASE SEE THE BELOW LINKS:



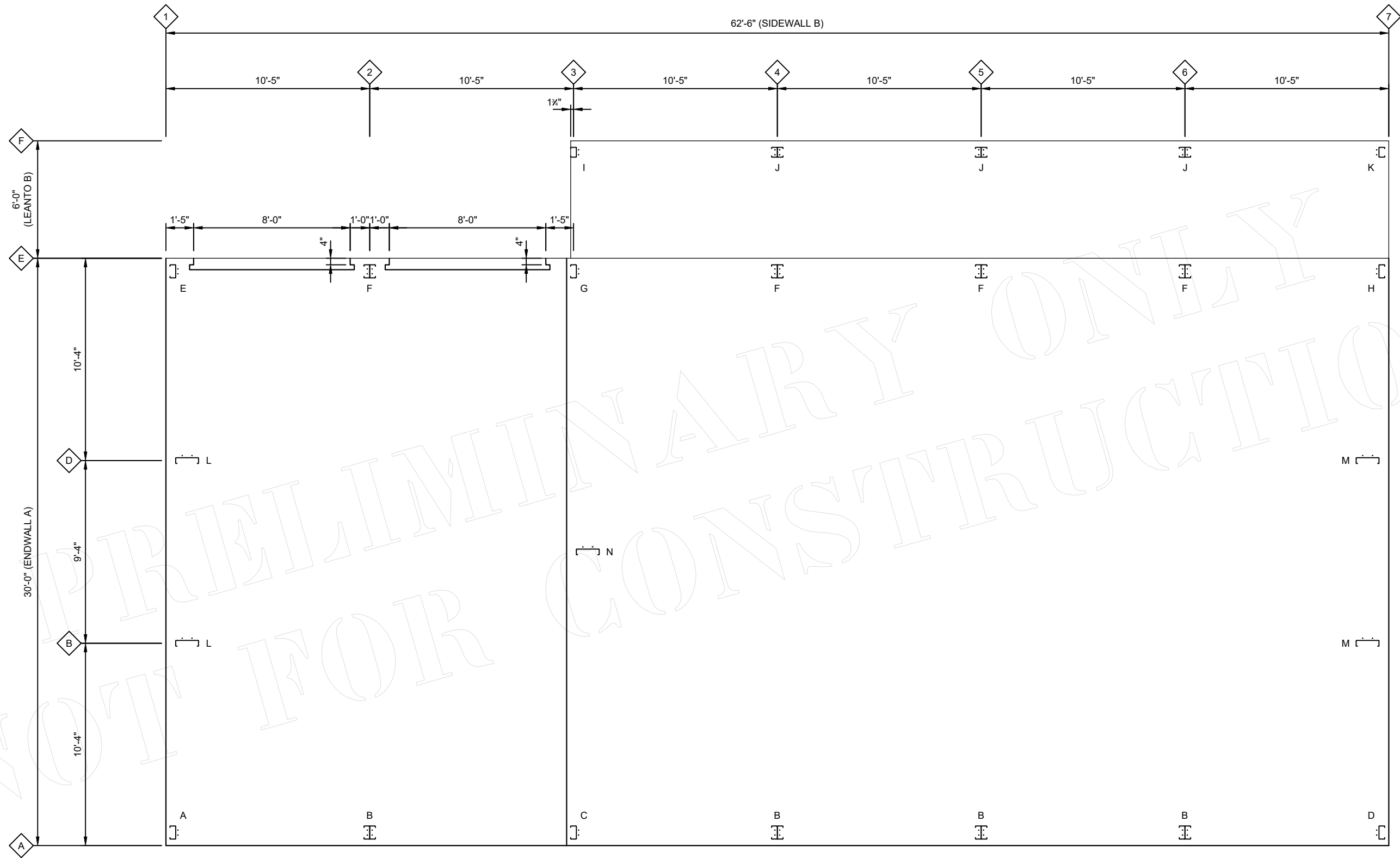
INSTALLATION MANUALS
<http://bit.ly/ACTInstallManuals>



CONSTRUCTION VIDEOS
<http://bit.ly/ACTConstructionVids>



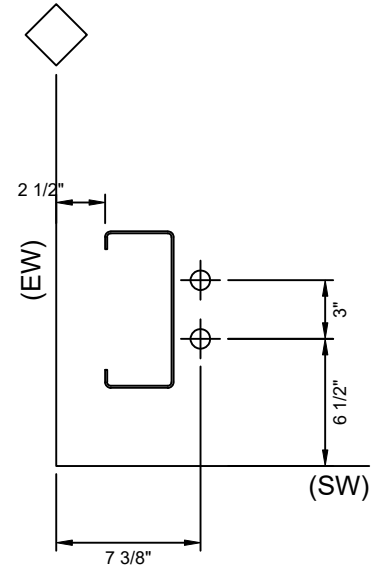
HINTS AND TIPS
<http://bit.ly/ACTConstructionTips>



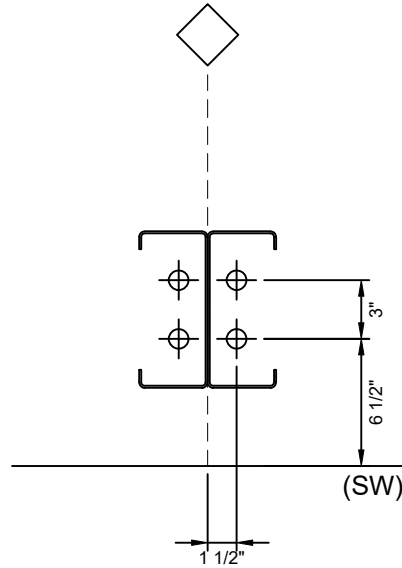
ANCHOR BOLTS		
QTY	LOCATION	DIA
60	SIDEWALL COLUMNS	1/2"
8	ENDWALL COLUMNS	1/2"
2	INTERNAL PARTITION WALL COLUMNS	1/2"
34	DOOR JAMB	1/2"
11	GIRT FLANGE BRACING	1/2"

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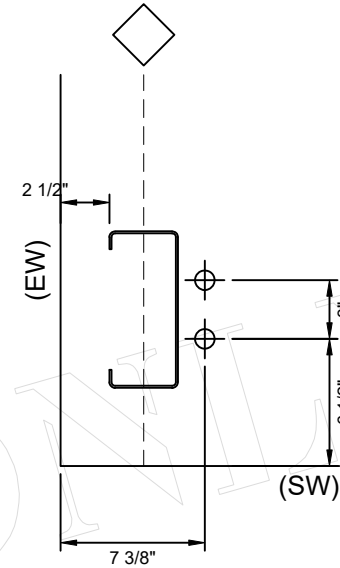




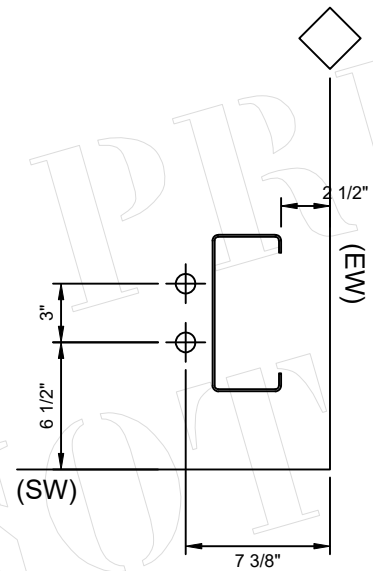
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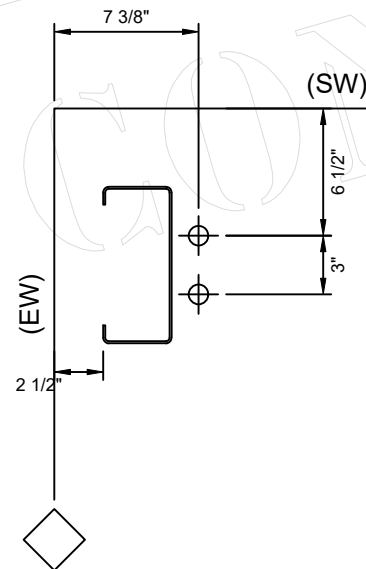
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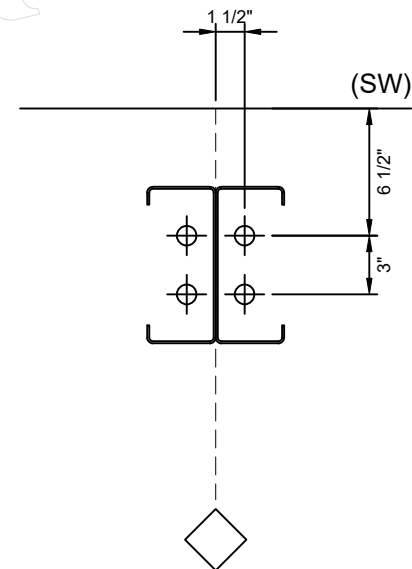
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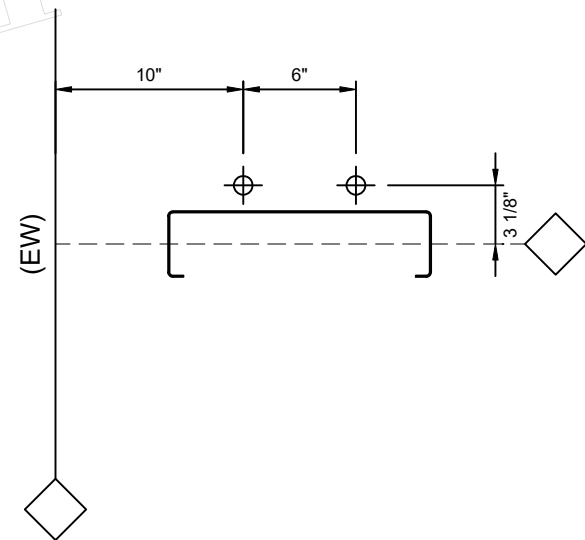
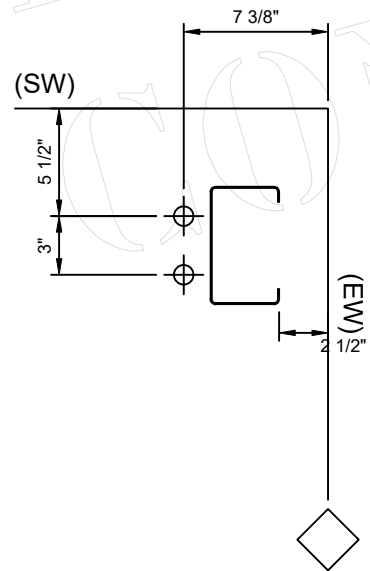
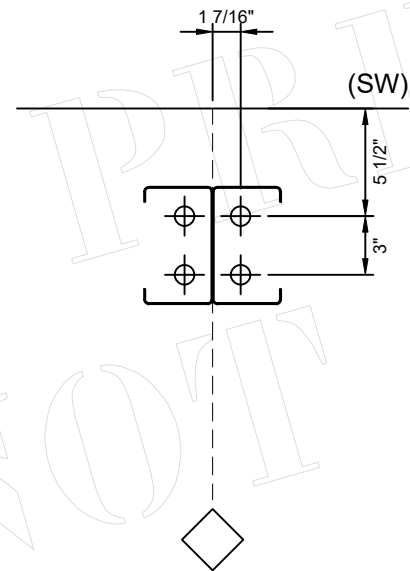
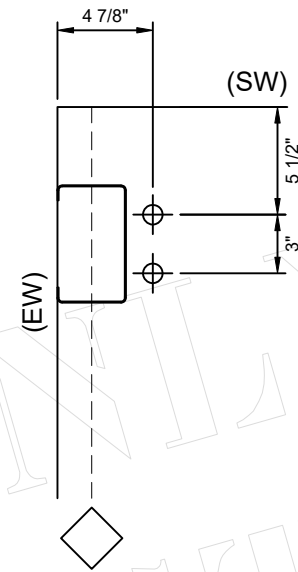
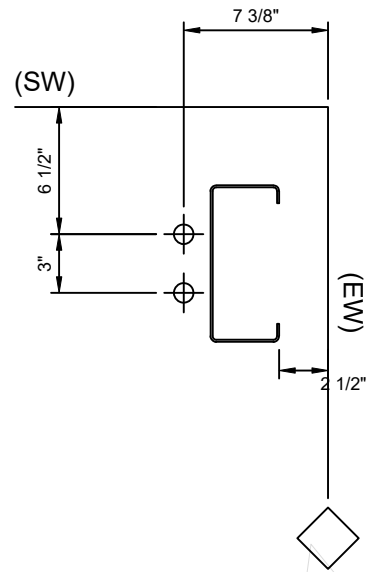
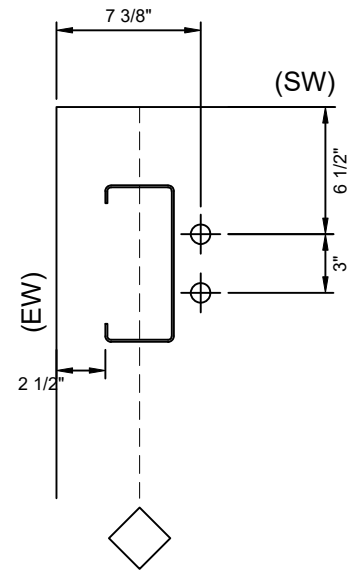


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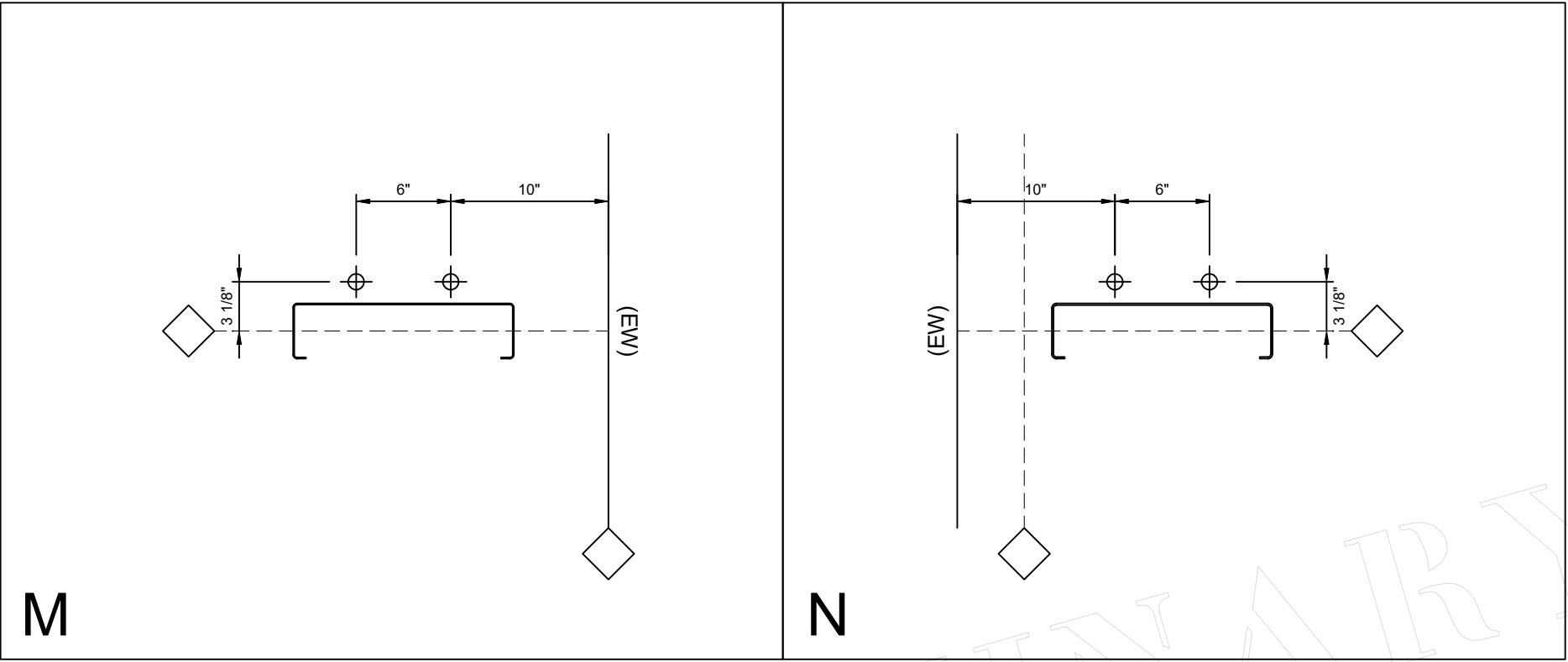


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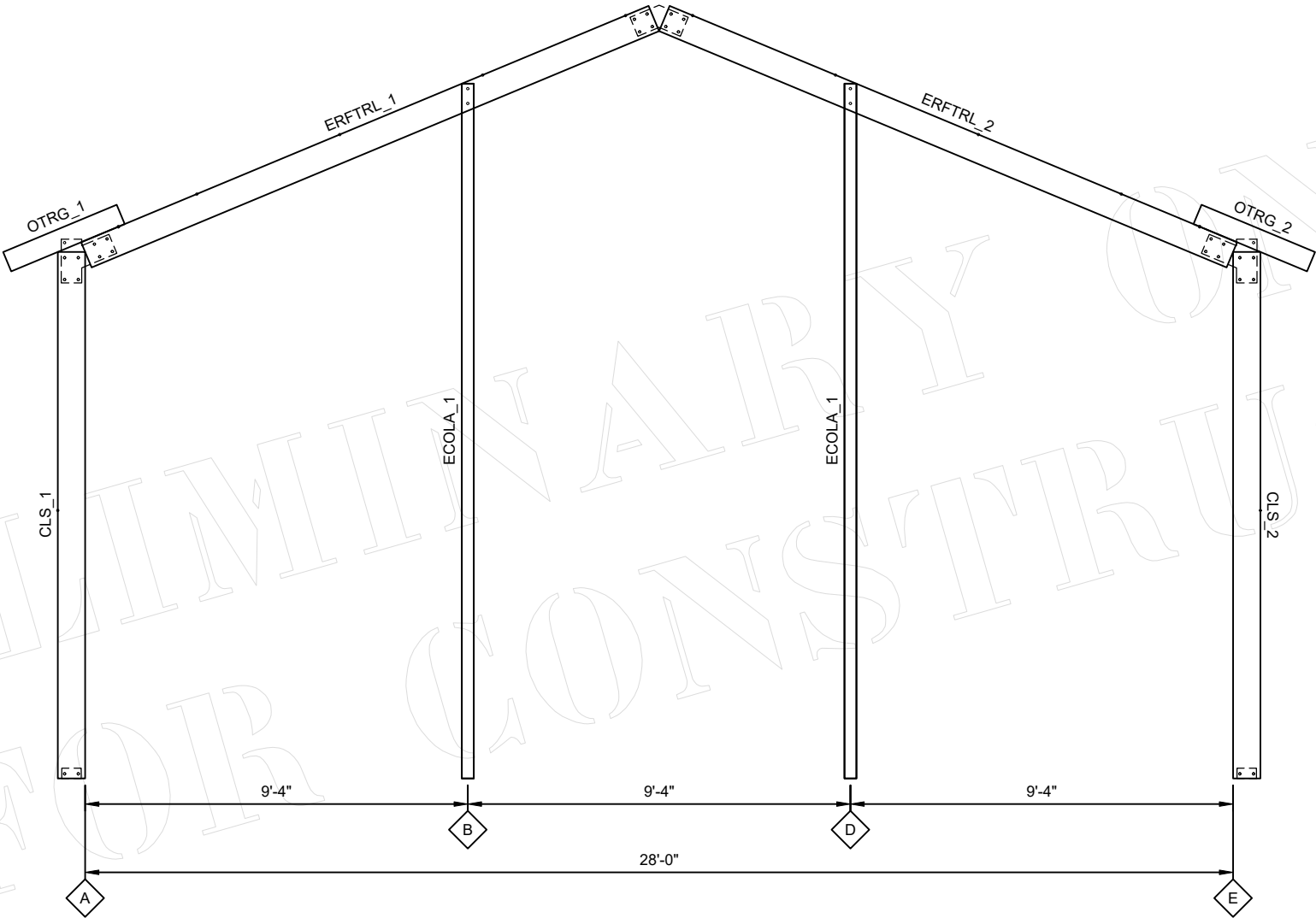
These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



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MEMBER TABLE		
Mark	Product	Length
CLS_1	8" x 12ga. CEE	12' - 10 3/16"
CLS_2	8" x 12ga. CEE	12' - 10 3/16"
ECOLA_1	14" x 14ga. CEE	16' - 11 7/16"
ERFTRL_1	8" x 12ga. CEE	14' - 11 15/16"
ERFTRL_2	8" x 12ga. CEE	14' - 11 15/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"



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6

Portal Section

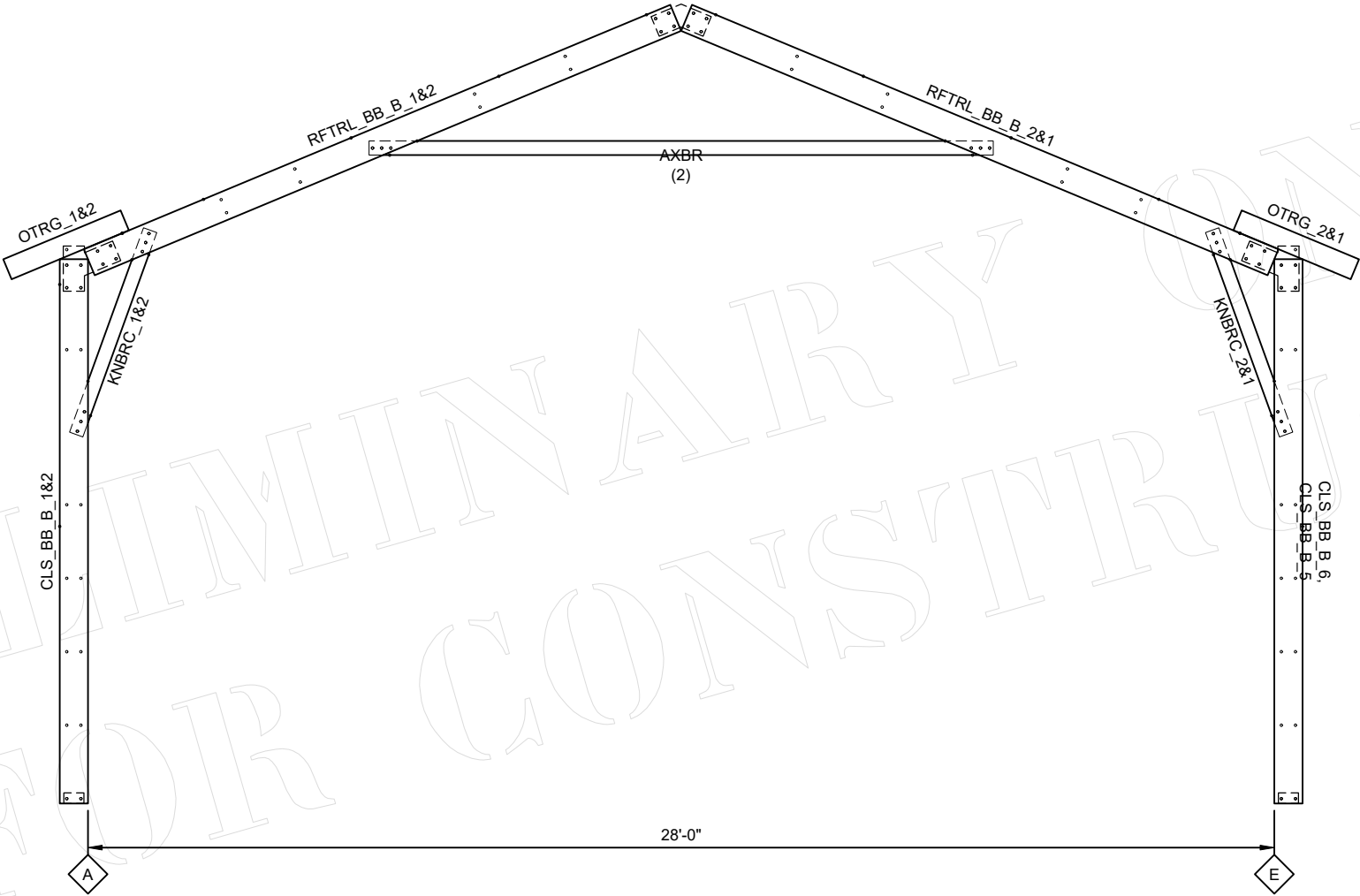
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Frame Line 1

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MEMBER TABLE		
Mark	Product	Length
AXBR	4" x 16ga. CEE	14' - 8 13/16"
CLS_BB_B_1	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_2	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_5	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_6	8" x 12ga. CEE	12' - 10 3/16"
KNBRC_1	4" x 16ga. CEE	5' - 1 9/16"
KNBRC_2	4" x 16ga. CEE	5' - 1 9/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"
RFTRL_BB_B_1	8" x 12ga. CEE	14' - 11 15/16"
RFTRL_BB_B_2	8" x 12ga. CEE	14' - 11 15/16"



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7

Portal Section

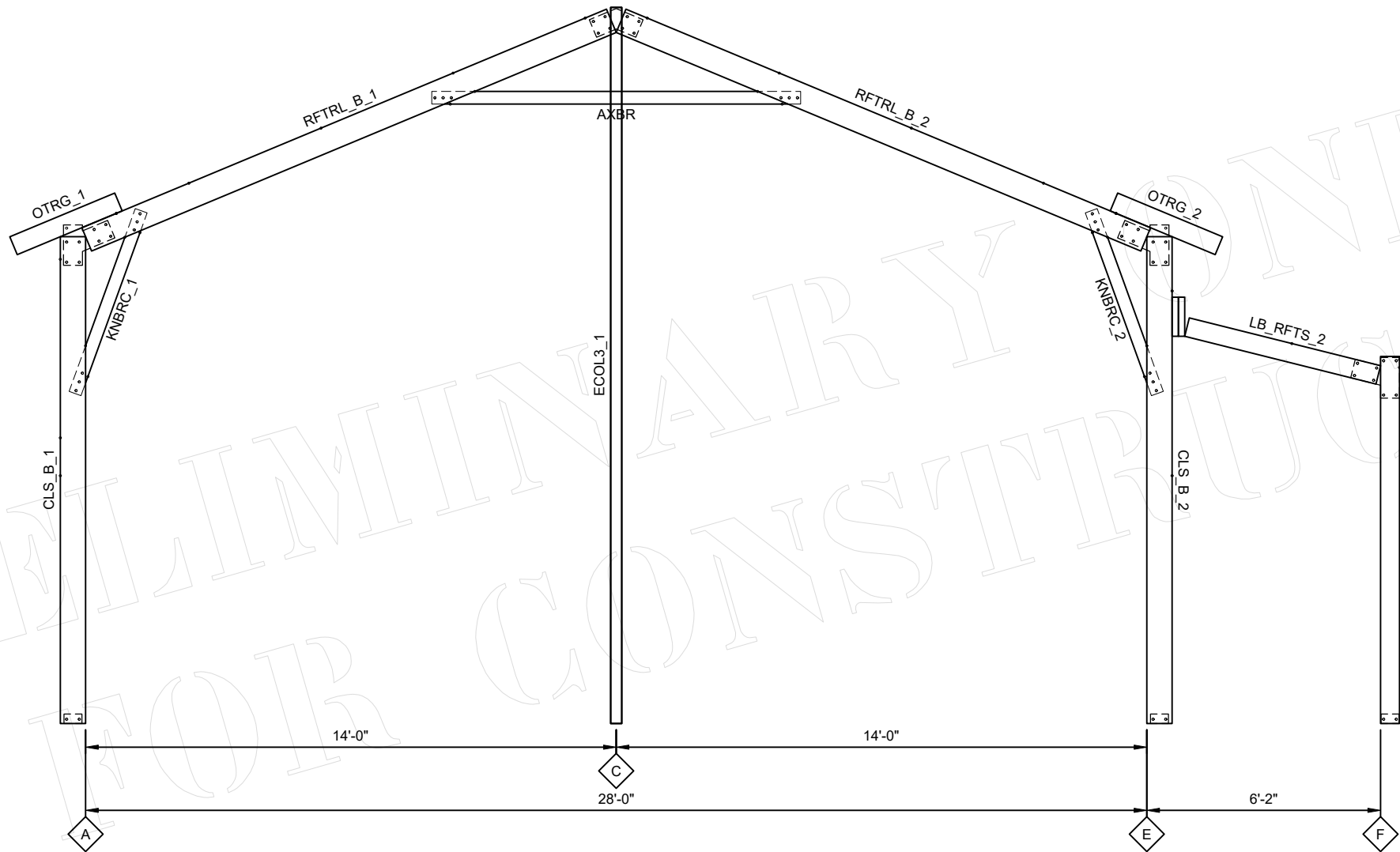
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Frame Line 2

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MEMBER TABLE		
Mark	Product	Length
AXBR	4" x 16ga. CEE	Varies
CLS_B_1	8" x 12ga. CEE	12' - 10 3/16"
CLS_B_2	8" x 12ga. CEE	12' - 10 3/16"
ECOL3_1	14" x 12ga. CEE	18' - 10 3/4"
KNBRC_1	4" x 16ga. CEE	5' - 1 9/16"
KNBRC_2	4" x 16ga. CEE	5' - 1 9/16"
LB_CL_2	6" x 16ga. CEE	9' - 8 1/4"
LB_RFTS_2	6" x 16ga. CEE	5' - 2 7/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"
RFTRL_B_1	8" x 12ga. CEE	14' - 11 15/16"
RFTRL_B_2	8" x 12ga. CEE	14' - 11 15/16"



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Portal Section

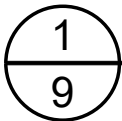
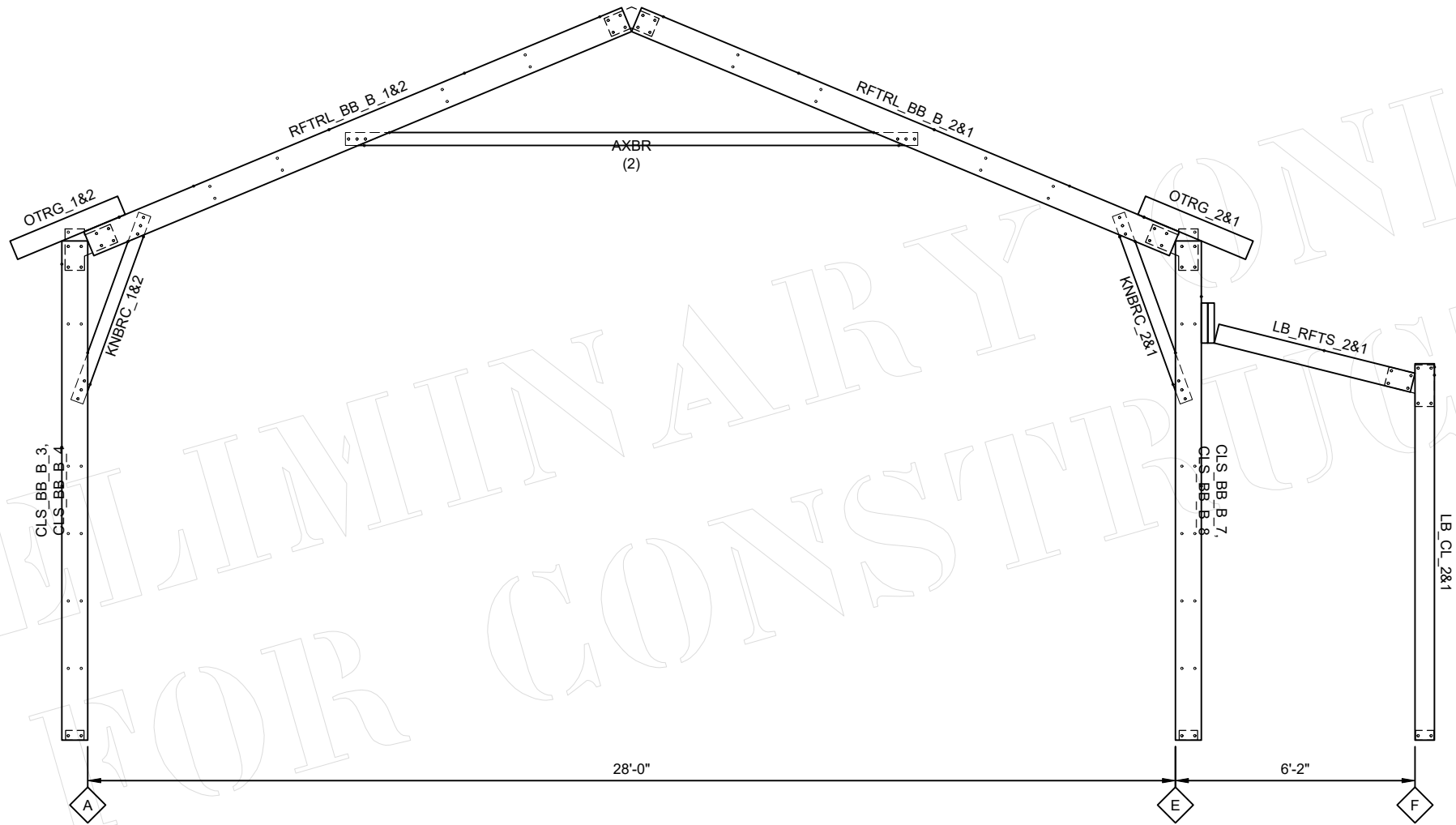
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Frame Line 3

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MEMBER TABLE		
Mark	Product	Length
AXBR	4" x 16ga. CEE	Varies
CLS_BB_B_3	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_4	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_7	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_8	8" x 12ga. CEE	12' - 10 3/16"
KNBRC_1	4" x 16ga. CEE	5' - 1 9/16"
KNBRC_2	4" x 16ga. CEE	5' - 1 9/16"
LB_CL_1	6" x 16ga. CEE	9' - 8 1/4"
LB_CL_2	6" x 16ga. CEE	9' - 8 1/4"
LB_RFTS_1	6" x 16ga. CEE	5' - 2 7/16"
LB_RFTS_2	6" x 16ga. CEE	5' - 2 7/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"
RFTRL_BB_B_1	8" x 12ga. CEE	14' - 11 15/16"
RFTRL_BB_B_2	8" x 12ga. CEE	14' - 11 15/16"



Portal Section

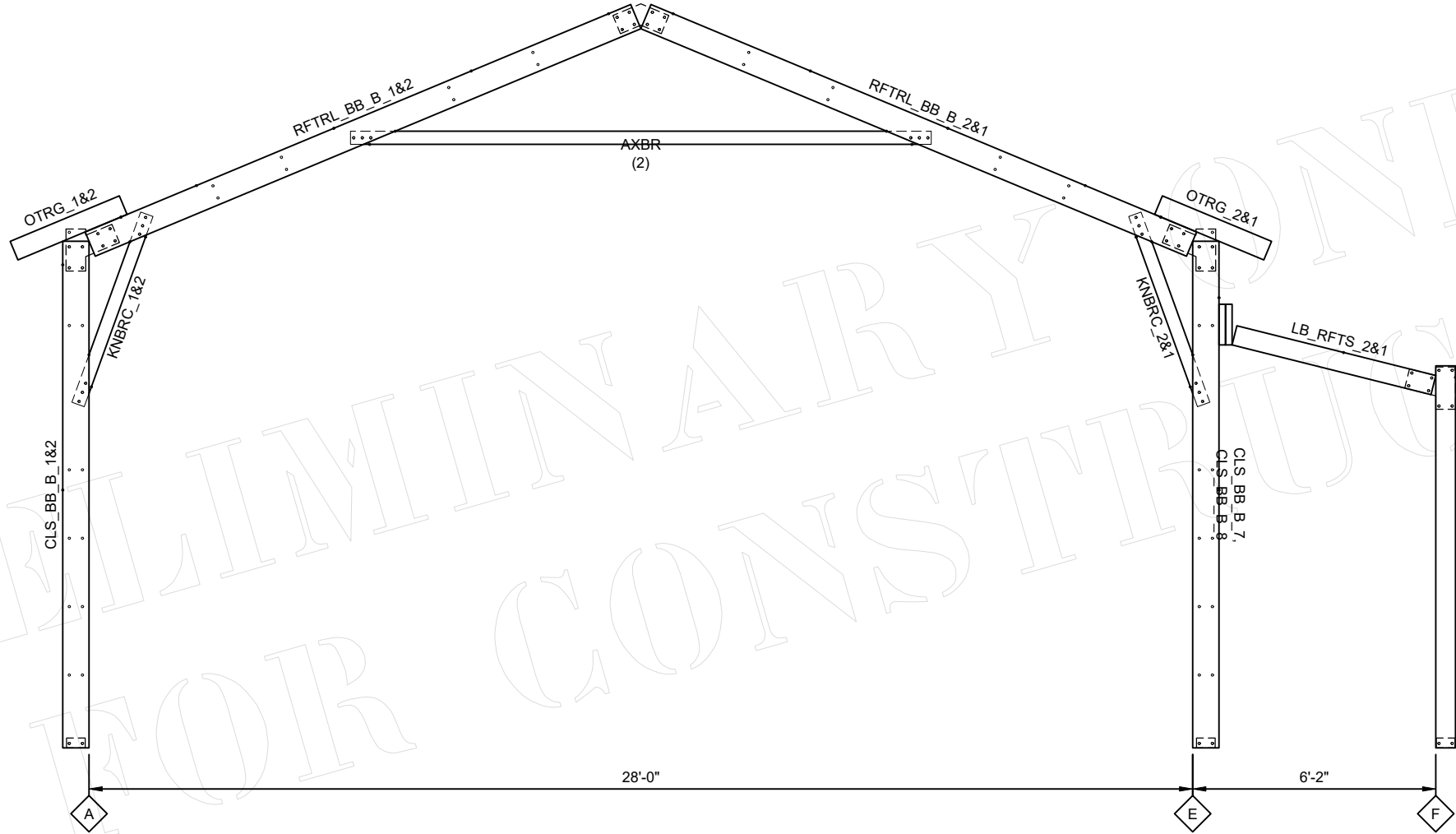
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Frame Line 4

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MEMBER TABLE		
Mark	Product	Length
AXBR	4" x 16ga. CEE	Varies
CLS_BB_B_1	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_2	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_7	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_8	8" x 12ga. CEE	12' - 10 3/16"
KNBRC_1	4" x 16ga. CEE	5' - 1 9/16"
KNBRC_2	4" x 16ga. CEE	5' - 1 9/16"
LB_CL_1	6" x 16ga. CEE	9' - 8 1/4"
LB_CL_2	6" x 16ga. CEE	9' - 8 1/4"
LB_RFTS_1	6" x 16ga. CEE	5' - 2 7/16"
LB_RFTS_2	6" x 16ga. CEE	5' - 2 7/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"
RFTRL_BB_B_1	8" x 12ga. CEE	14' - 11 15/16"
RFTRL_BB_B_2	8" x 12ga. CEE	14' - 11 15/16"



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Portal Section

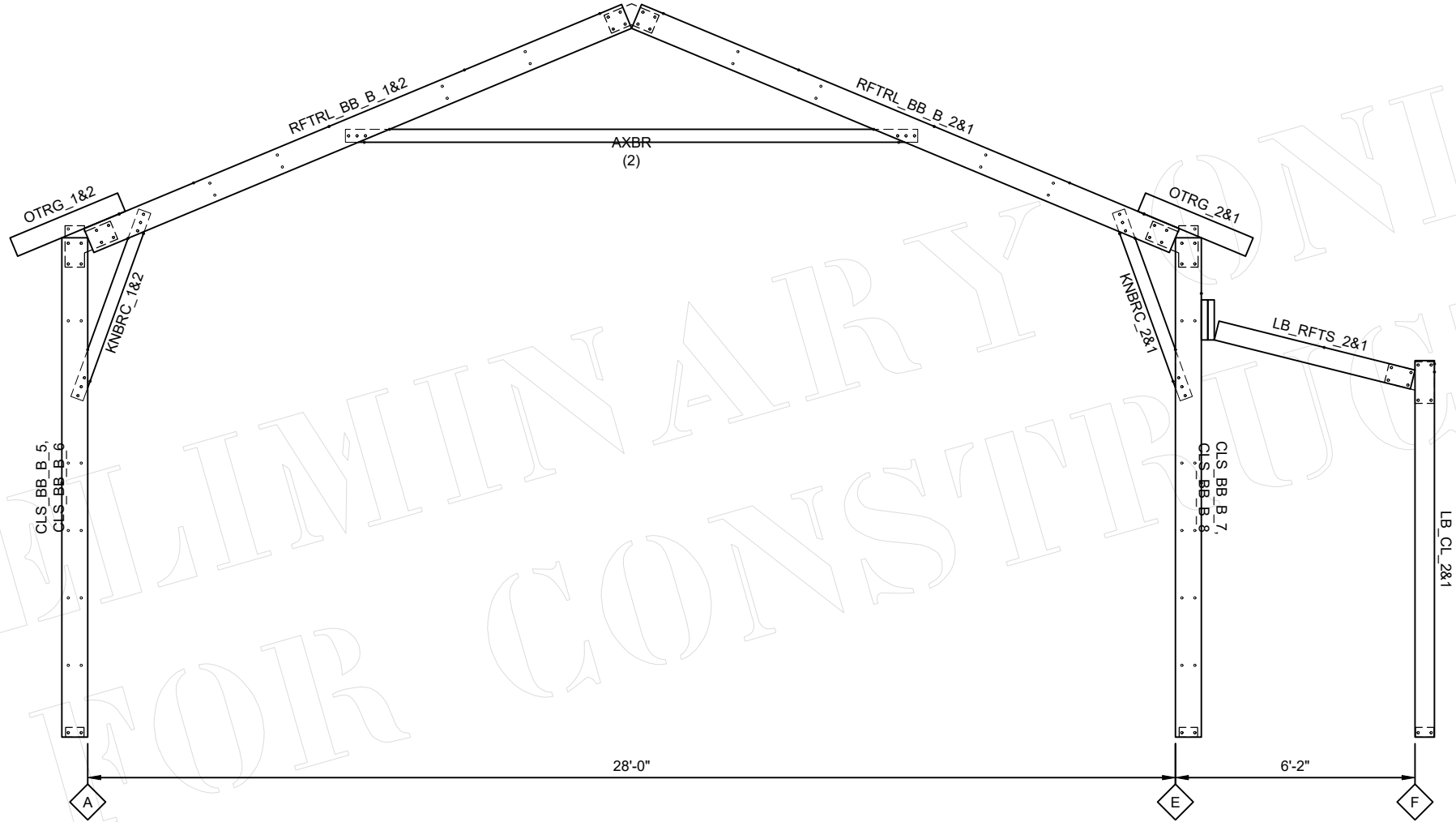
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Frame Line 5

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MEMBER TABLE		
Mark	Product	Length
AXBR	4" x 16ga. CEE	Varies
CLS_BB_B_5	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_6	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_7	8" x 12ga. CEE	12' - 10 3/16"
CLS_BB_B_8	8" x 12ga. CEE	12' - 10 3/16"
KNBRC_1	4" x 16ga. CEE	5' - 1 9/16"
KNBRC_2	4" x 16ga. CEE	5' - 1 9/16"
LB_CL_1	6" x 16ga. CEE	9' - 8 1/4"
LB_CL_2	6" x 16ga. CEE	9' - 8 1/4"
LB_RFTS_1	6" x 16ga. CEE	5' - 2 7/16"
LB_RFTS_2	6" x 16ga. CEE	5' - 2 7/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"
RFTRL_BB_B_1	8" x 12ga. CEE	14' - 11 15/16"
RFTRL_BB_B_2	8" x 12ga. CEE	14' - 11 15/16"



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Portal Section

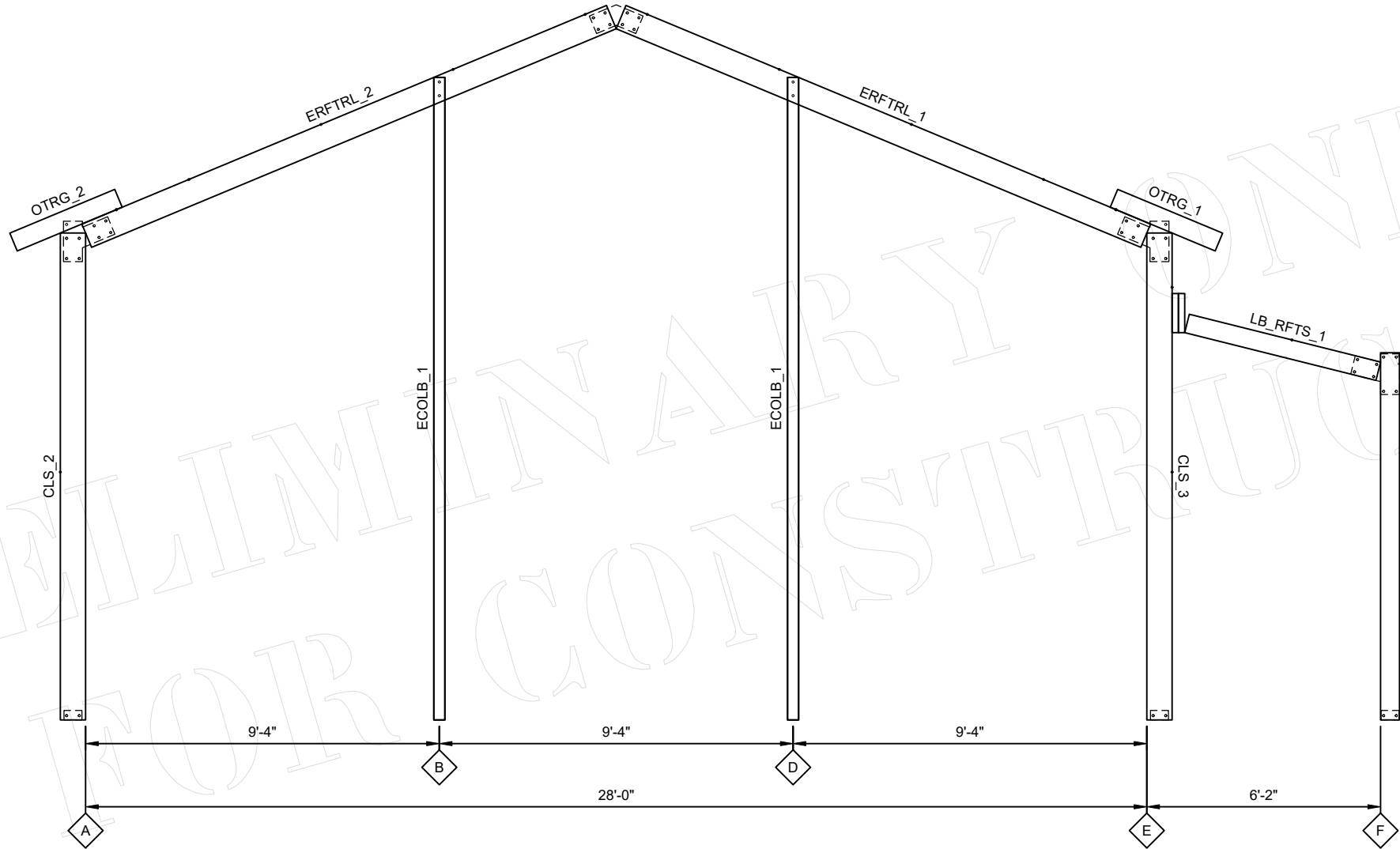
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Frame Line 6

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



MEMBER TABLE		
Mark	Product	Length
CLS_2	8" x 12ga. CEE	12' - 10 3/16"
CLS_3	8" x 12ga. CEE	12' - 10 3/16"
ECOLB_1	14" x 14ga. CEE	16' - 11 7/16"
ERFTRL_1	8" x 12ga. CEE	14' - 11 15/16"
ERFTRL_2	8" x 12ga. CEE	14' - 11 15/16"
LB_CL_1	6" x 16ga. CEE	9' - 8 1/4"
LB_RFTS_1	6" x 16ga. CEE	5' - 2 7/16"
OTRG_1	6in x 2in 14G Channel	3' - 0"
OTRG_2	6in x 2in 14G Channel	3' - 0"



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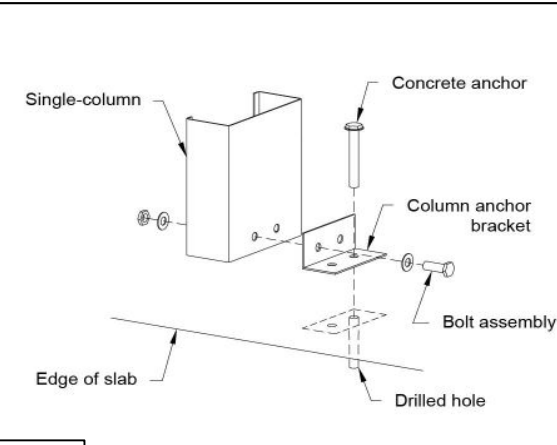
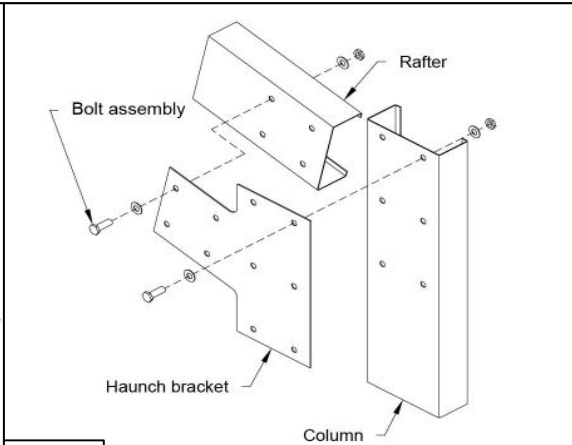
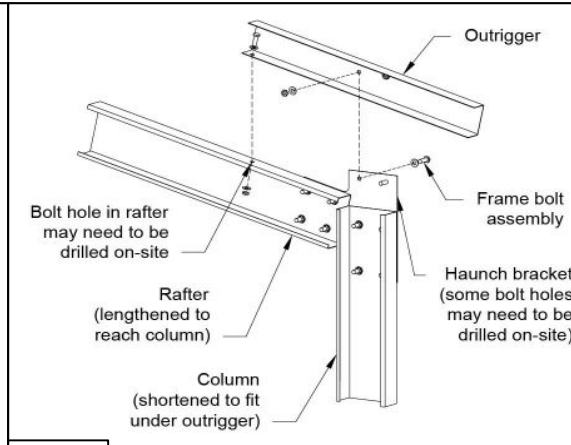
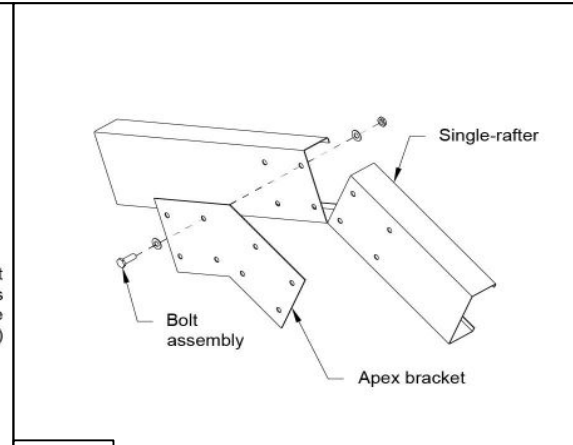
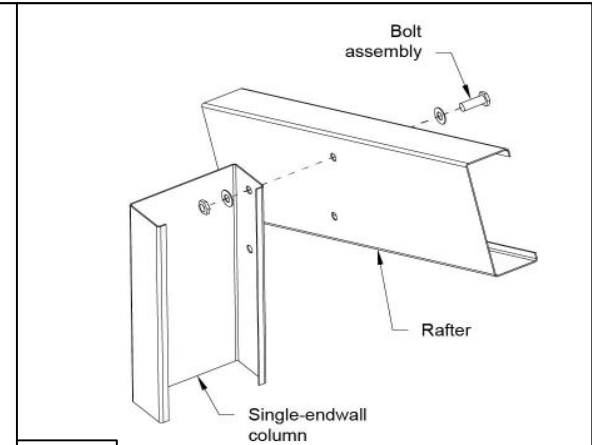





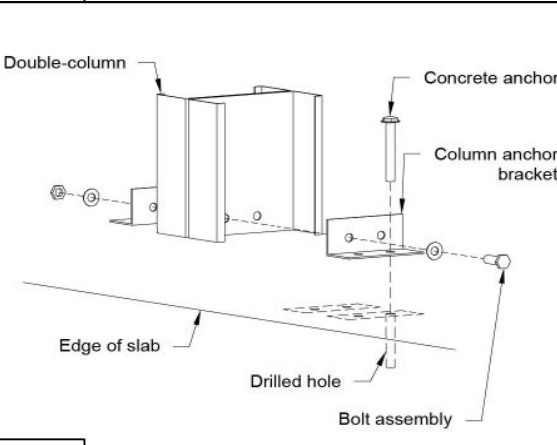
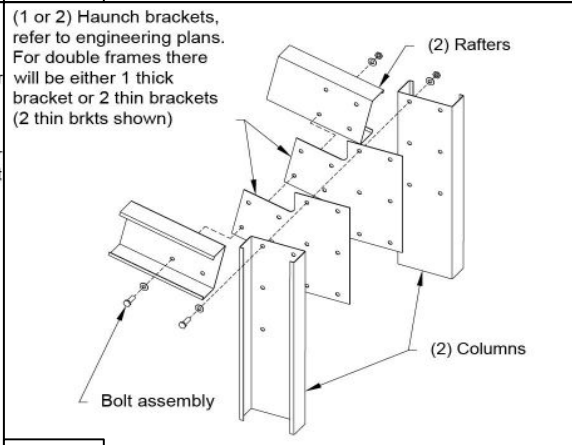
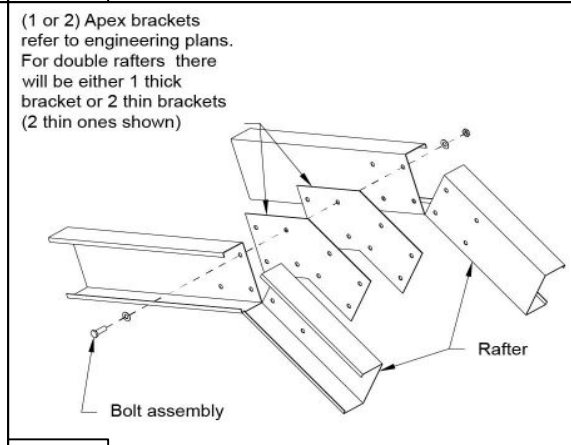
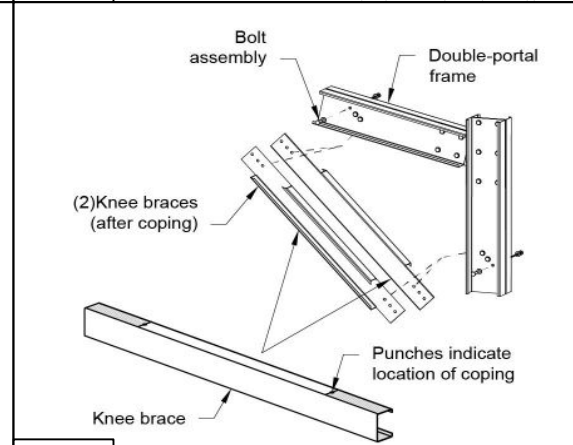
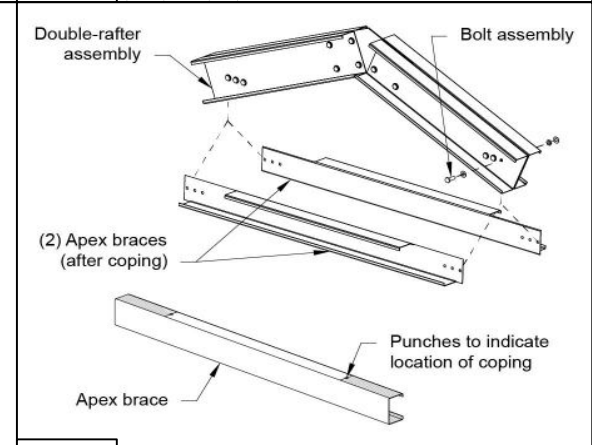





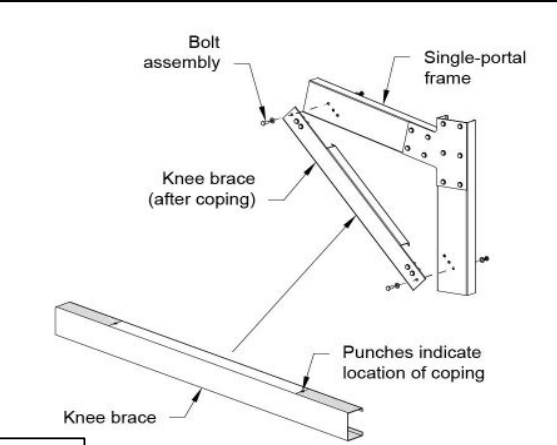
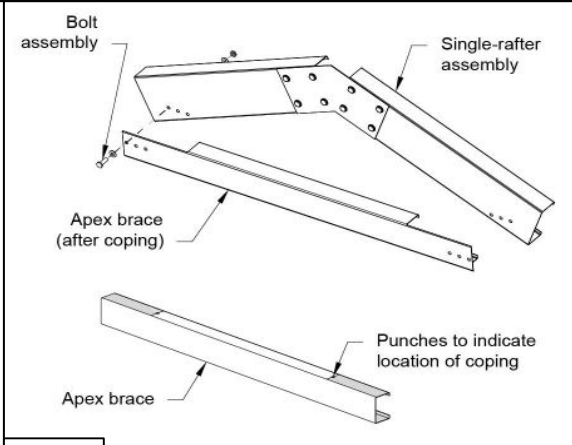
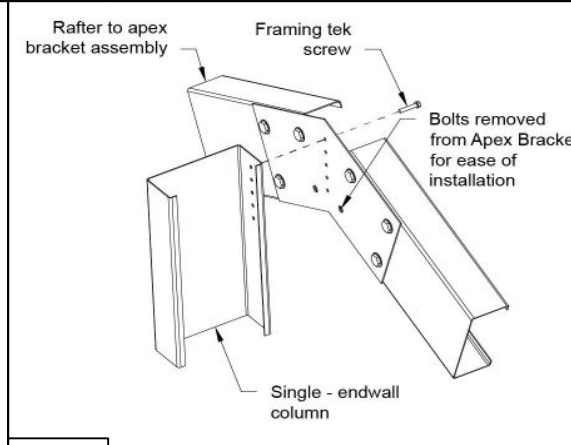
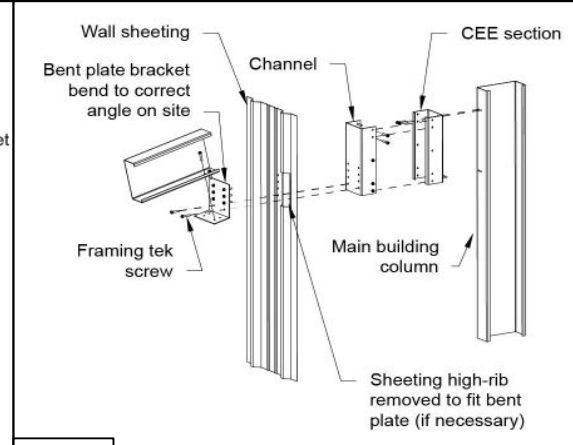
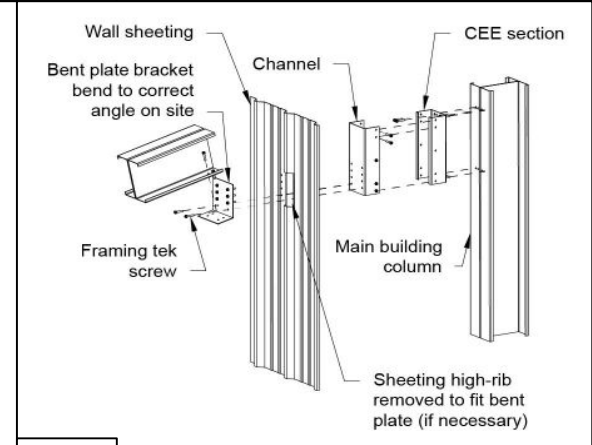





Portal Section

SCALE: 1/4" = 1'-0"

Frame Line 7

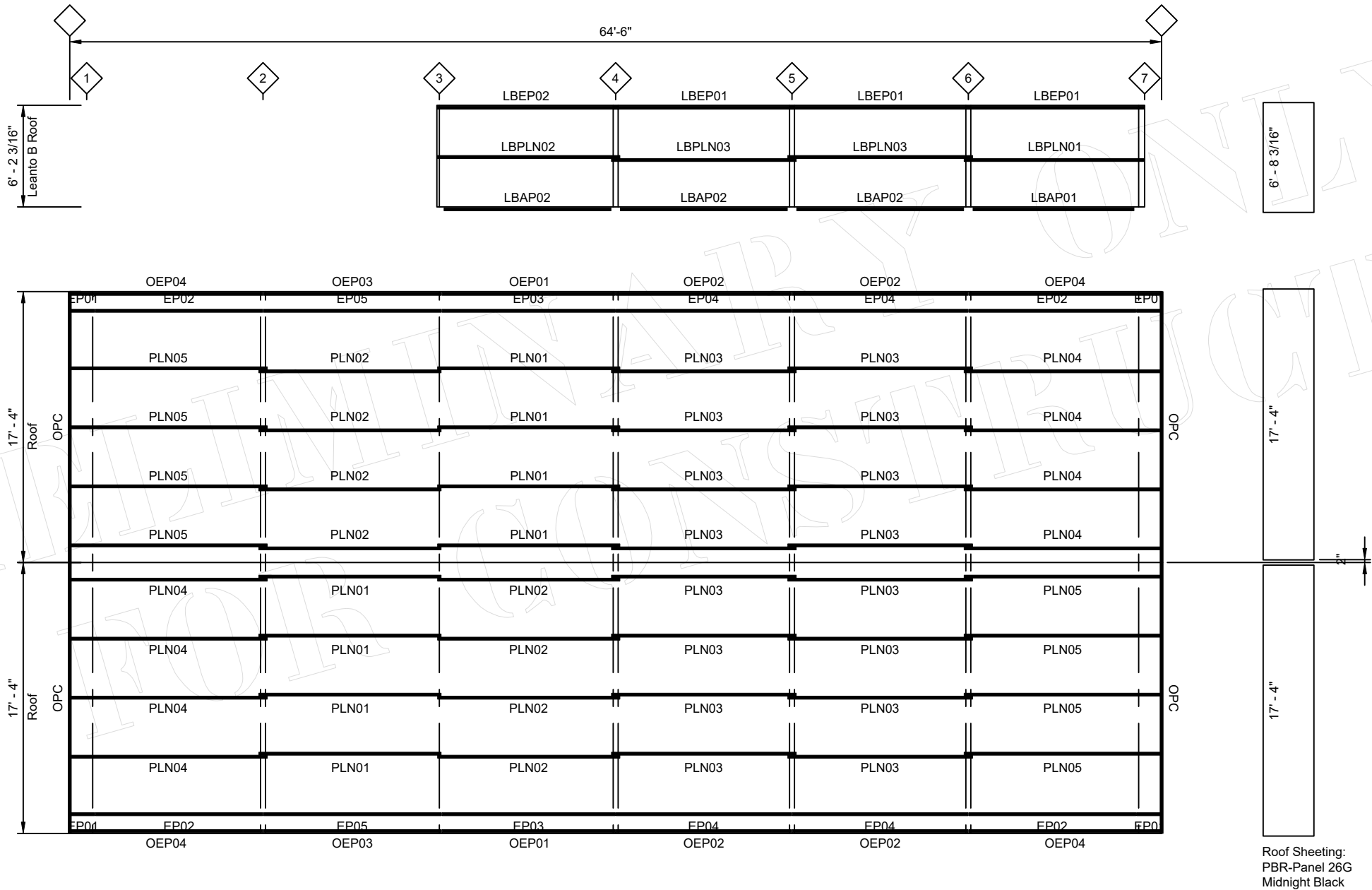
These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



				
 <p>Single Base Bracket</p> <p>https://r.actbs.com/g/abs525</p>	 <p>Single Haunch Bracket</p> <p>https://r.actbs.com/g/abs265</p>	 <p>Overhang Haunch</p> <p>https://r.actbs.com/g/abs429</p>	 <p>Single Apex Bracket</p> <p>https://r.actbs.com/g/abs021</p>	 <p>Endwall Column to Rafter</p> <p>https://r.actbs.com/g/abs185</p>
				
 <p>Double Base Bracket</p> <p>https://r.actbs.com/g/abs521</p>	 <p>Double Haunch Bracket</p> <p>https://r.actbs.com/g/abs269</p>	 <p>Double Apex Bracket</p> <p>https://r.actbs.com/g/abs017</p>	 <p>Double Knee Brace</p> <p>https://r.actbs.com/g/abs285</p>	 <p>Double Apex Brace</p> <p>https://r.actbs.com/g/abs001</p>
				
 <p>Single Knee Brace</p> <p>https://r.actbs.com/g/abs289</p>	 <p>Single Apex Brace</p> <p>https://r.actbs.com/g/abs009</p>	 <p>Endwall Column to Rafter Peak</p> <p>https://r.actbs.com/g/abs181</p>	 <p>LT Rafter to Column Connector</p> <p>https://r.actbs.com/g/abs302</p>	 <p>LT Rafter to Column Connector</p> <p>https://r.actbs.com/g/abs001</p>

These are generic construction details - your exact building details may vary from these details. For example, washers are shown on many of the bolted connections, however the actual requirement for washer use is specified in the Engineering Plans. These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

MEMBER TABLE		
Mark	Product	Length
EP01	6in x 3.5in 14G Eave Strut	1' - 5 3/4"
EP02	6in x 3.5in 14G Eave Strut	9' - 10 1/2"
EP03	6in x 3.5in 14G Eave Strut	10' - 2 3/4"
EP04	6in x 3.5in 14G Eave Strut	10' - 4 1/2"
EP05	6in x 3.5in 14G Eave Strut	10' - 6 1/4"
LBAP01	6in x 3.5in 14G Eave Strut	9' - 6 1/8"
LBAP02	6in x 3.5in 14G Eave Strut	9' - 10 3/8"
LBEP01	6in x 3.5in 14G Eave Strut	10' - 5"
LBEP02	6in x 3.5in 14G Eave Strut	10' - 6 3/4"
LBPLN01	6" x 16ga. LGSI ZEE	10' - 8"
LBPLN02	6" x 16ga. LGSI ZEE	10' - 9 3/4"
LBPLN03	6" x 16ga. LGSI ZEE	10' - 11"
OEP01	6" x 16ga. CEE	10' - 2 3/4"
OEP02	6" x 16ga. CEE	10' - 4 1/2"
OEP03	6" x 16ga. CEE	10' - 6 1/4"
OEP04	6" x 16ga. CEE	11' - 4 3/4"
OPC	6in x 2in 14G Channel	17' - 4"
PLN01	6" x 16ga. LGSI ZEE	10' - 9 1/4"
PLN02	6" x 16ga. LGSI ZEE	10' - 9 1/4"
PLN03	6" x 16ga. LGSI ZEE	10' - 11"
PLN04	6" x 16ga. LGSI ZEE	11' - 8"
PLN05	6" x 16ga. LGSI ZEE	11' - 8"



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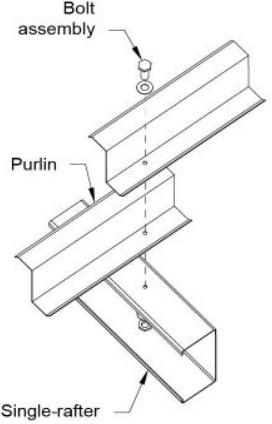
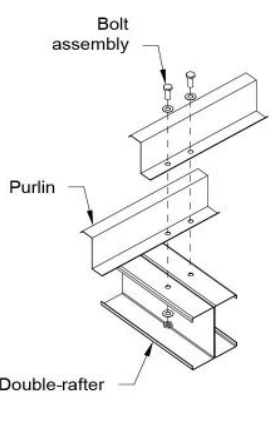
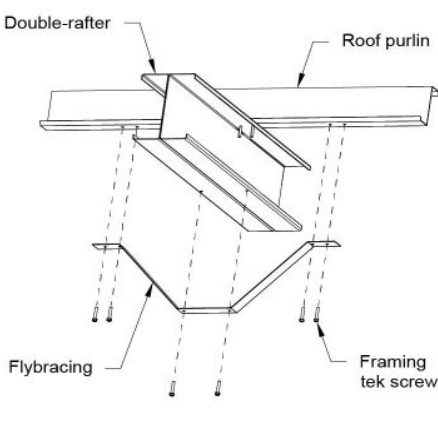
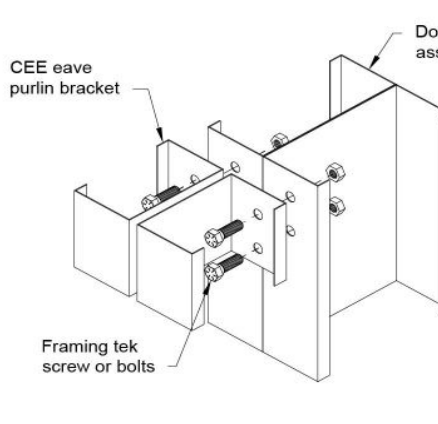
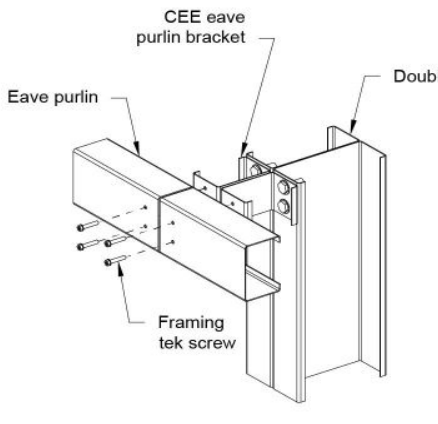





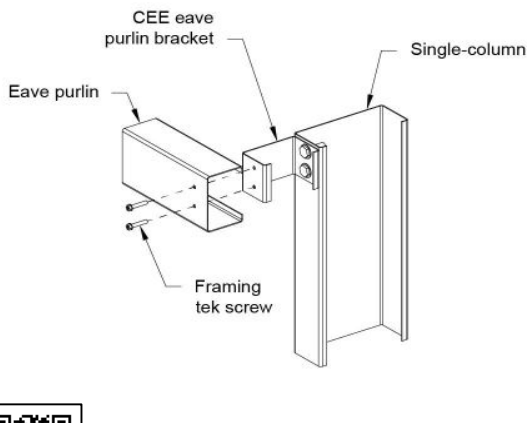
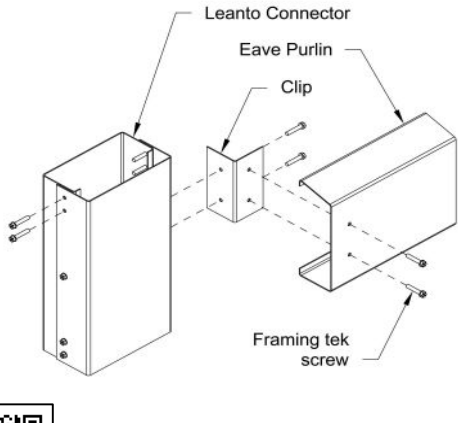
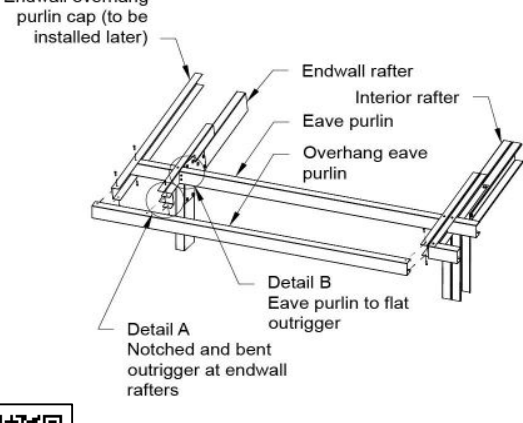
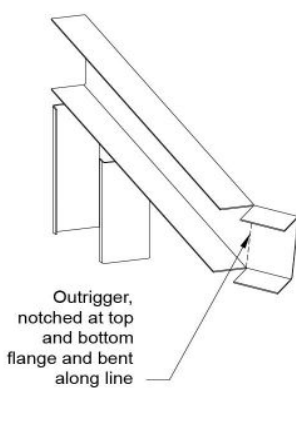
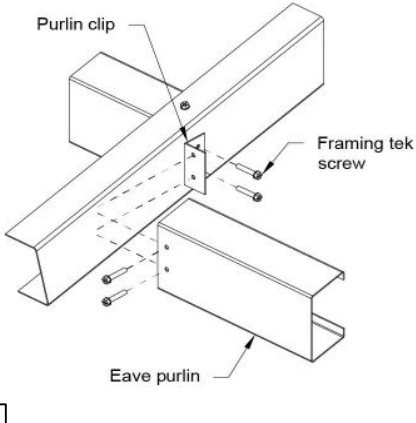





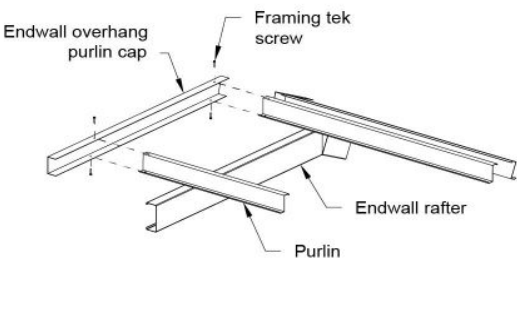
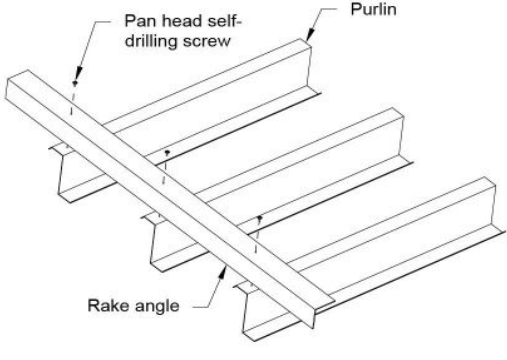
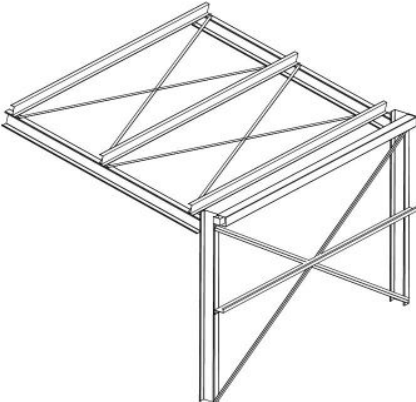
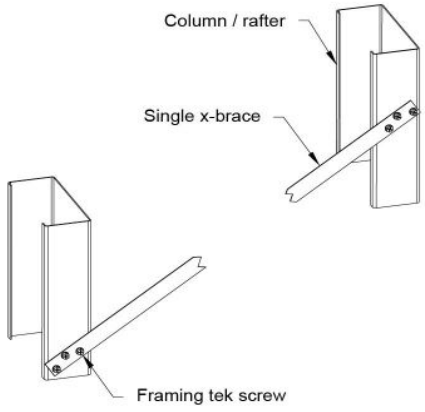




Roof Framing Plan



JOBNO VNUJ98779926
SHEET 14 of 28

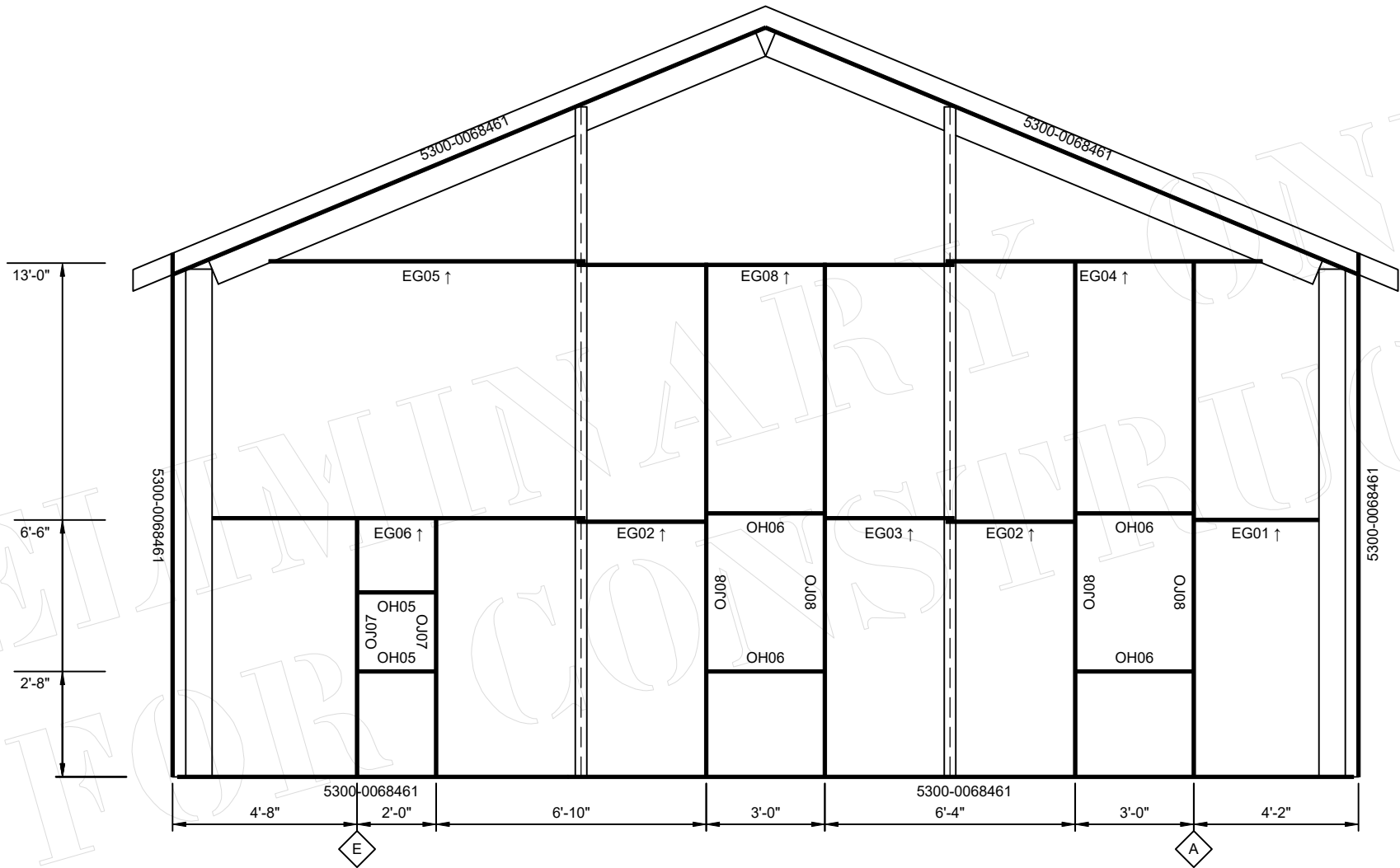
DATE 8/20/2025
SCALE 1/8" = 1'-0"



 <p>Bolt assembly Purlin Single-rafter</p>	 <p>Bolt assembly Purlin Double-rafter</p>	 <p>Double-rafter Roof purlin Flybracing Framing tek screw</p>	 <p>CEE eave purlin bracket Double-column assembly Framing tek screw or bolts</p>	 <p>CEE eave purlin bracket Eave purlin Double-column Framing tek screw</p>
 <p>Purlin Rafter Single</p> <p>https://r.actbs.com/g/abs453</p>	 <p>Purlin Rafter Double</p> <p>https://r.actbs.com/g/abs445</p>	 <p>Flybrace Rafter Double</p> <p>https://r.actbs.com/g/abs206</p>	 <p>Eave Purlin Bracket Double CEE</p> <p>https://r.actbs.com/g/abs077</p>	 <p>Eave Purlin Double CEE</p> <p>https://r.actbs.com/g/abs074</p>
 <p>CEE eave purlin bracket Eave purlin Single-column Framing tek screw</p>	 <p>Leanto Connector Eave Purlin Clip Framing tek screw</p>	 <p>Endwall overhang purlin cap (to be installed later) Endwall rafter Interior rafter Eave purlin Overhang eave purlin Detail B Eave purlin to flat outrigger Detail A Notched and bent outrigger at endwall rafters</p>	 <p>Outrigger, notched at top and bottom flange and bent along line</p>	 <p>Purlin clip Framing tek screw Eave purlin</p>
 <p>Eave Purlin End CEE</p> <p>https://r.actbs.com/g/abs075</p>	 <p>Eave Purlin To Channel-CEE Connection</p> <p>https://r.actbs.com/g/CJx4CuG</p>	 <p>Overhang Overview</p> <p>https://r.actbs.com/g/abs425</p>	 <p>Notched Outrigger</p> <p>https://r.actbs.com/g/abs413</p>	 <p>To Back of Outrigger</p> <p>https://r.actbs.com/g/abs421</p>
 <p>Endwall overhang purlin cap Framing tek screw Endwall rafter Purlin</p>	 <p>Pan head self-drilling screw Purlin Rake angle</p>	 <p>X-Bracing</p>	 <p>Column / rafter Single x-brace Framing tek screw</p>	
 <p>Overhang Purlin Cap</p> <p>https://r.actbs.com/g/abs405</p>	 <p>Rake Angle</p> <p>https://r.actbs.com/g/abs465</p>	 <p>X-Bracing</p> <p>https://r.actbs.com/g/abs549</p>	 <p>X-Bracing</p> <p>https://r.actbs.com/g/abs545</p>	

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MEMBER TABLE		
Mark	Product	Length
5300-0068461	2in x 4in Angle	Stock Length
EG01	6" x 16ga. LGSi ZEE	3' - 2"
EG02	6" x 16ga. LGSi ZEE	3' - 3 1/4"
EG03	6" x 16ga. LGSi ZEE	3' - 3 1/4"
EG04	6" x 16ga. LGSi ZEE	8' - 0 1/16"
EG05	6" x 16ga. LGSi ZEE	8' - 0 1/16"
EG06	6" x 16ga. LGSi ZEE	9' - 5 1/4"
EG08	6" x 16ga. LGSi ZEE	9' - 6 1/2"
OH05	6" x 16ga. CEE	2' - 0"
OH06	6" x 16ga. CEE	3' - 0"
OJ07	6in x 2in 14G Channel	6' - 6"
OJ08	6in x 2in 14G Channel	13' - 0"
↑ OUTSIDE FLANGE OF GIRT POINTS UP		
↓ OUTSIDE FLANGE OF GIRT POINTS DOWN		



3
16

Endwall A Girt Layout

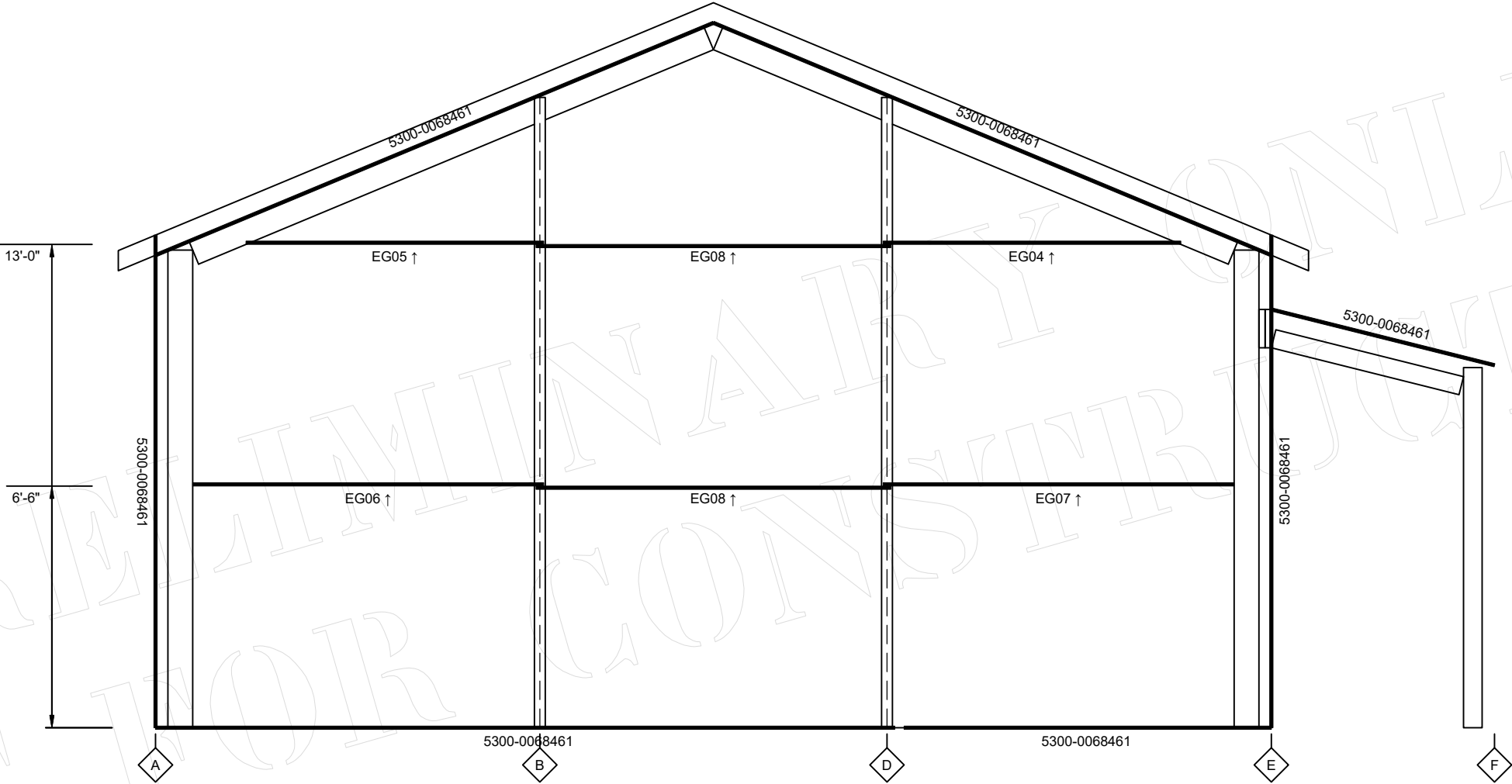
SCALE: 1/4" = 1'-0"

Frame Line 1

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



MEMBER TABLE		
Mark	Product	Length
5300-0068461	2in x 4in Angle	Stock Length
EG04	6" x 16ga. LGSI ZEE	8' - 0 1/16"
EG05	6" x 16ga. LGSI ZEE	8' - 0 1/16"
EG06	6" x 16ga. LGSI ZEE	9' - 5 1/4"
EG07	6" x 16ga. LGSI ZEE	9' - 5 1/4"
EG08	6" x 16ga. LGSI ZEE	9' - 6 1/2"
↑ OUTSIDE FLANGE OF GIRT POINTS UP		
↓ OUTSIDE FLANGE OF GIRT POINTS DOWN		



3
17

Endwall B Girt Layout

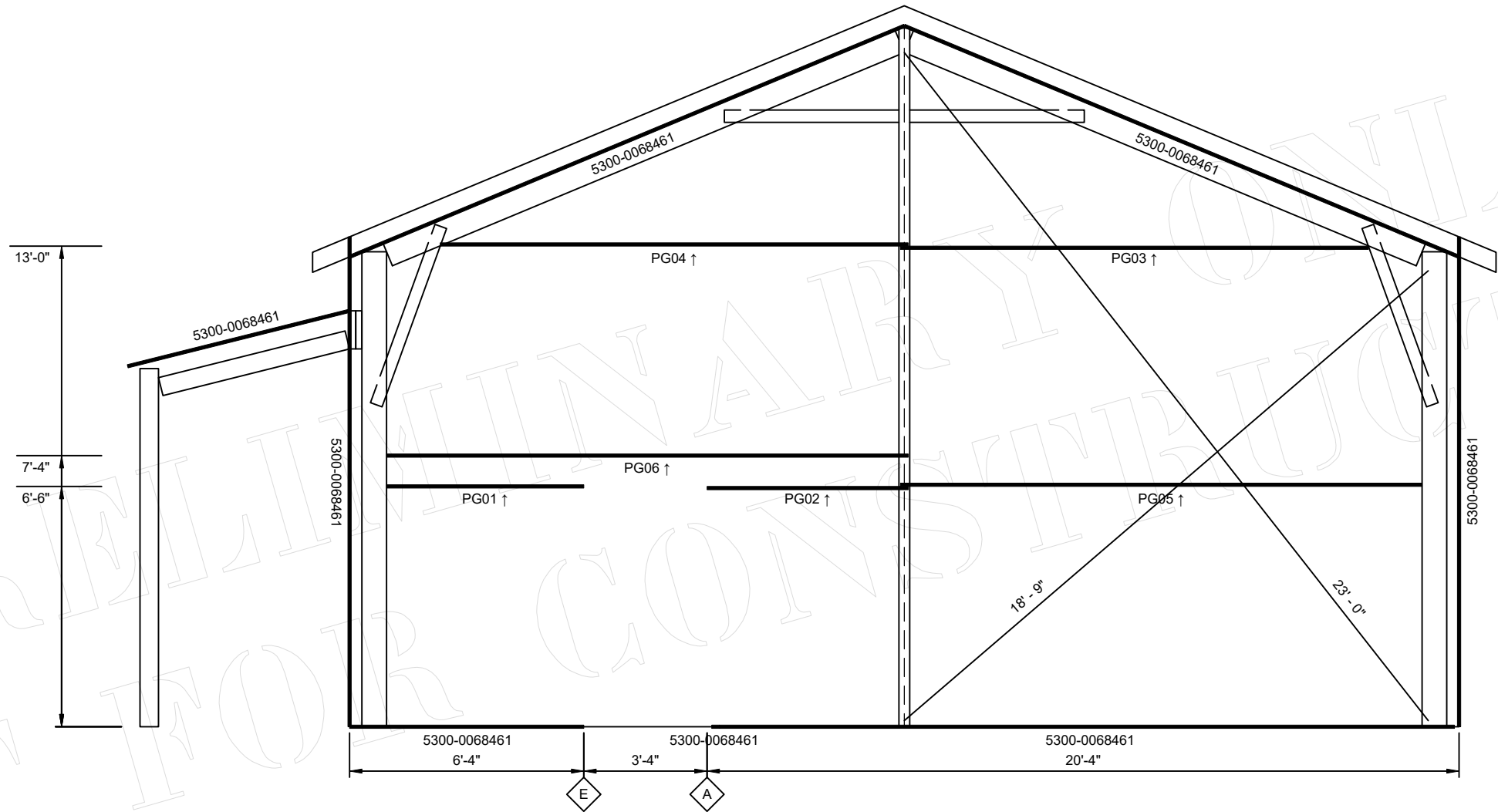
SCALE: 1/4" = 1'-0"

Frame Line 7

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



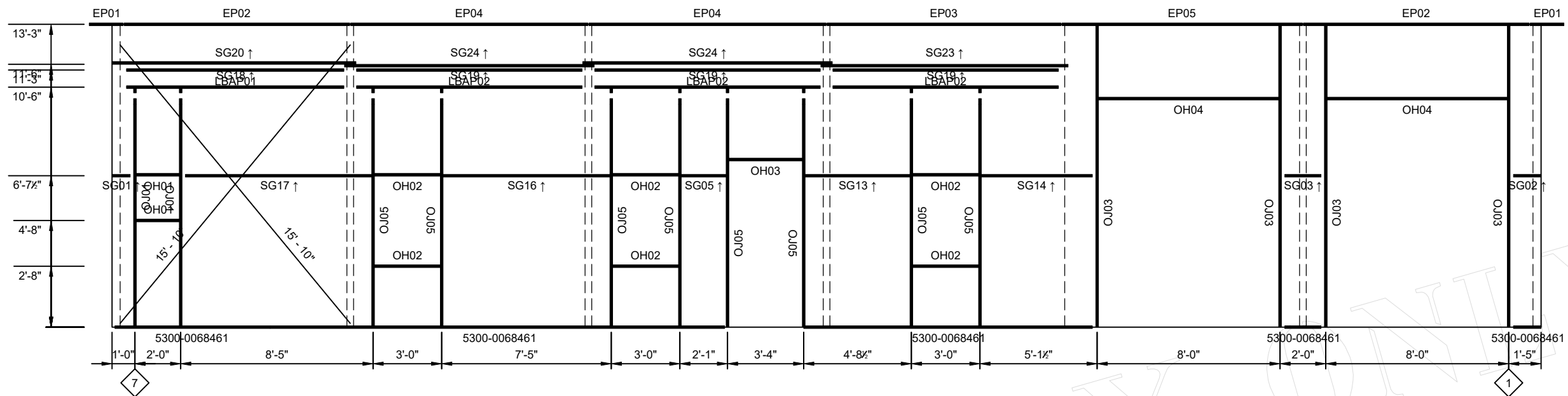
MEMBER TABLE		
Mark	Product	Length
5300-0068461	2in x 4in Angle	Stock Length
PG01	6" x 16ga. LGSI ZEE	5' - 4"
PG02	6" x 16ga. LGSI ZEE	5' - 5 1/4"
PG03	6" x 16ga. LGSI ZEE	12' - 7 13/16"
PG04	6" x 16ga. LGSI ZEE	12' - 7 13/16"
PG05	6" x 16ga. LGSI ZEE	14' - 1 1/4"
PG06	6" x 16ga. LGSI ZEE	14' - 1 1/4"
↑ OUTSIDE FLANGE OF GIRT POINTS UP		
↓ OUTSIDE FLANGE OF GIRT POINTS DOWN		



3 Partition Under Roof Frame 3 Girt Layout
18 SCALE: 1/4" = 1'-0" Frame Line 3

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

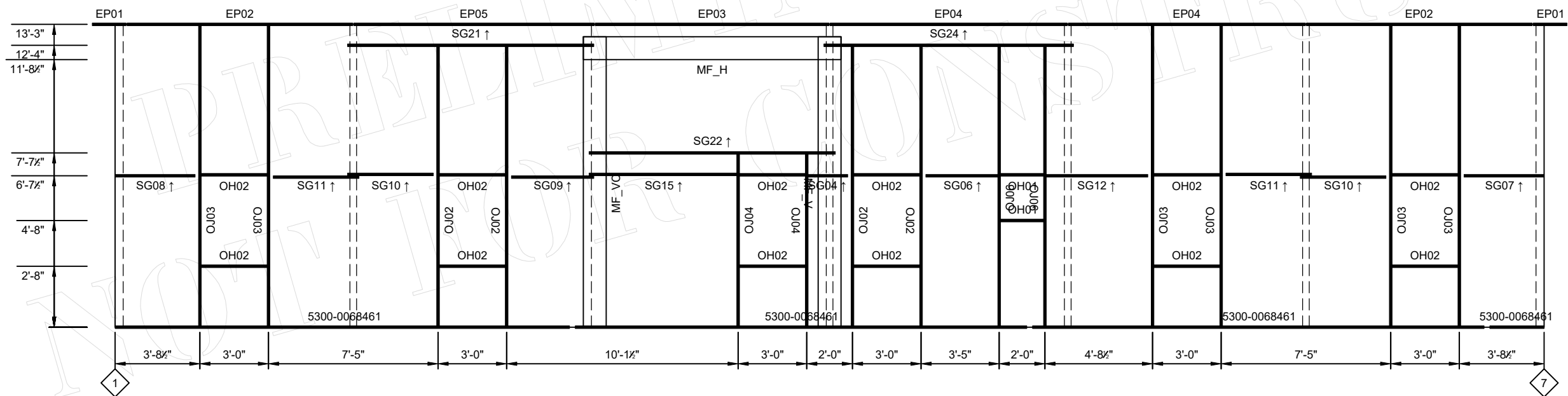




2 Sidewalk B Girt Layout

SCALE: 3/16" = 1'-0"

Frame Line E



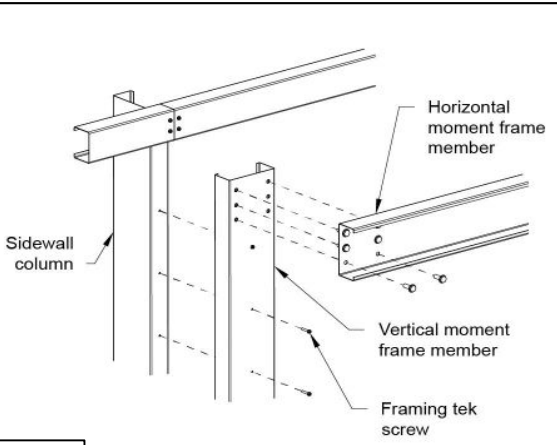
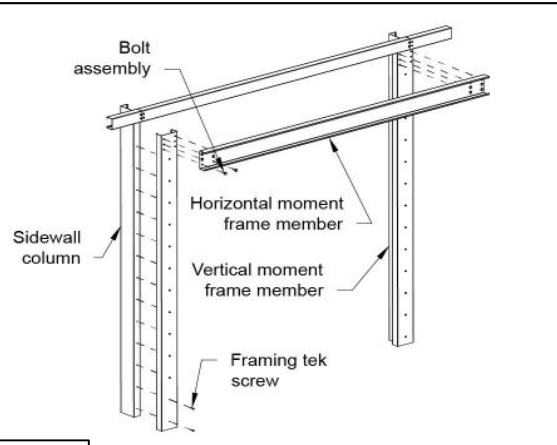
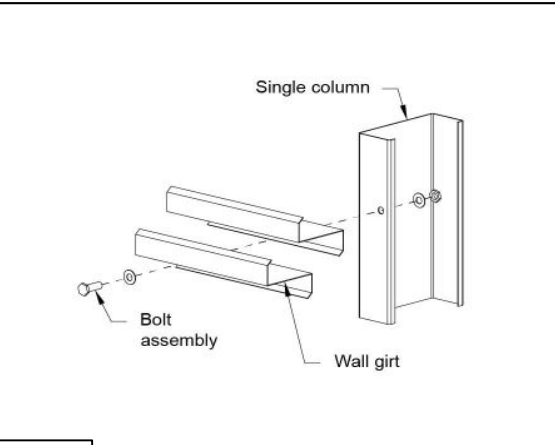
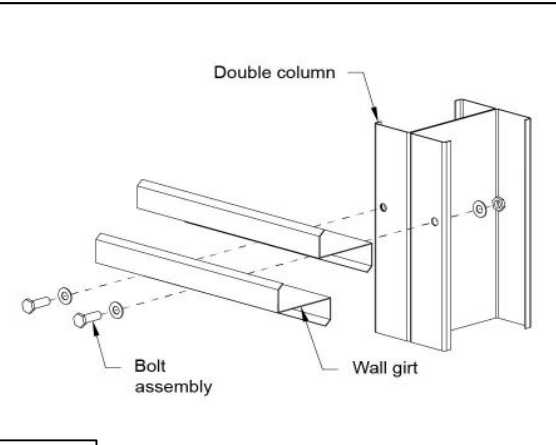
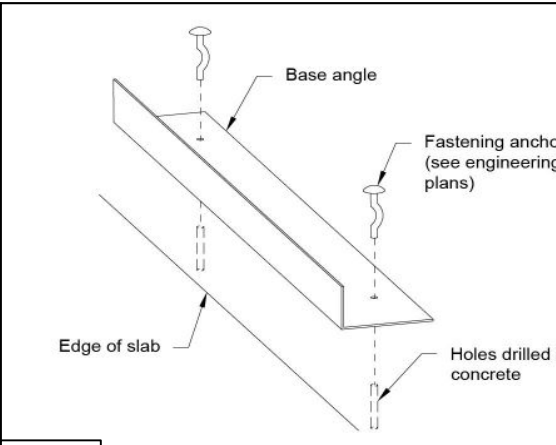





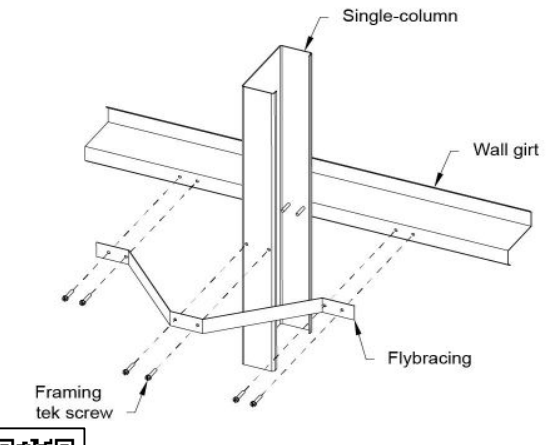
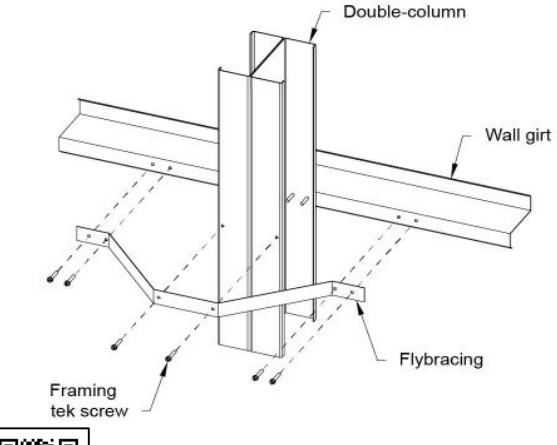
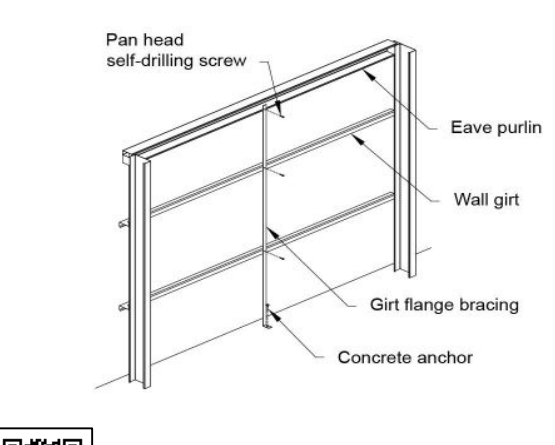
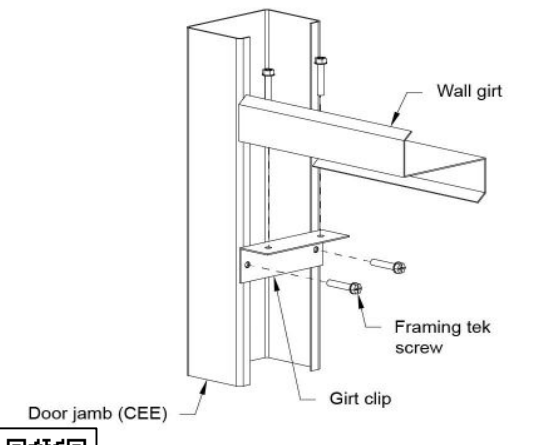
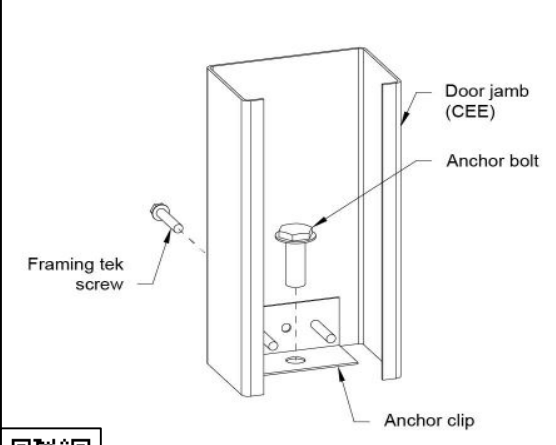





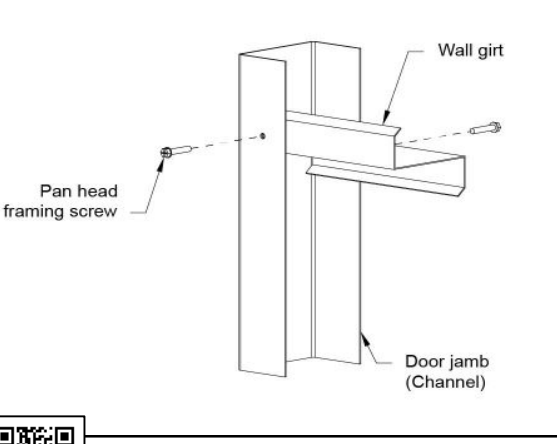
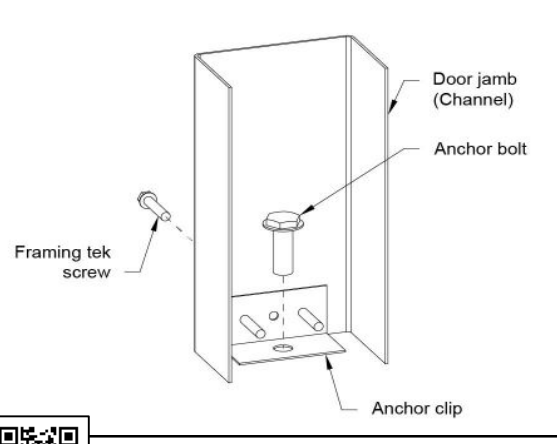
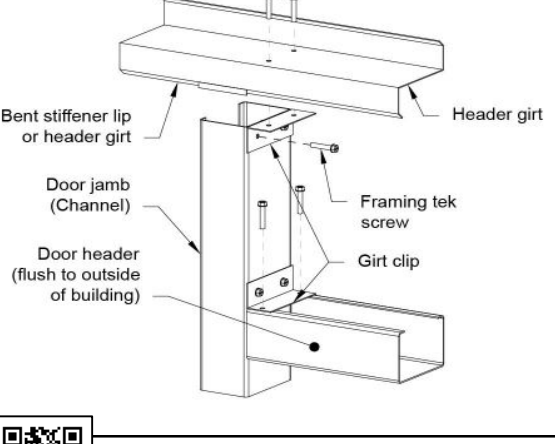
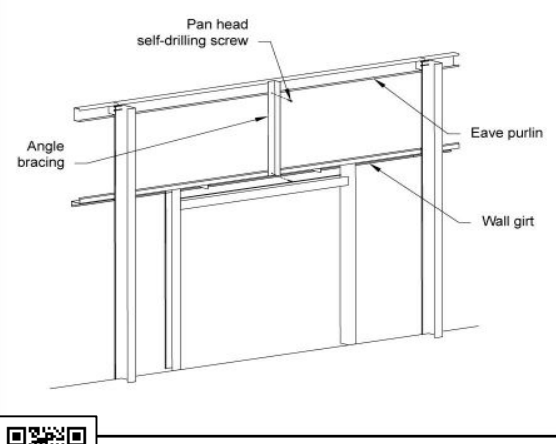
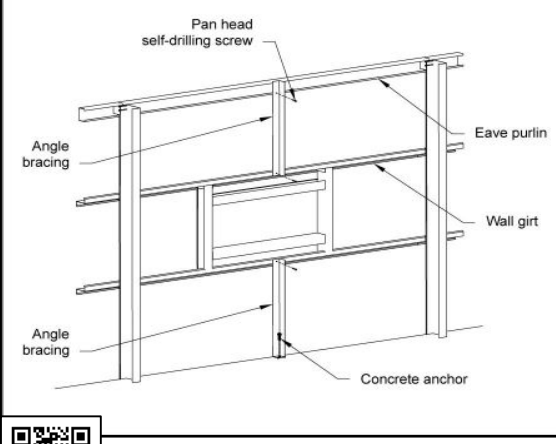





1 Sidewall A Girt Layout

SCALE: 3/16" = 1'-0"

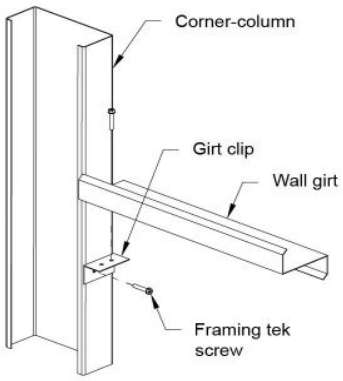
Frame Line A

MEMBER TABLE		
Mark	Product	Length
5300-0068461	2in x 4in Angle	Stock Length
EP01	6in x 3.5in 14G Eave Strut	1' - 5 3/4"
EP02	6in x 3.5in 14G Eave Strut	9' - 10 1/2"
EP03	6in x 3.5in 14G Eave Strut	10' - 2 3/4"
EP04	6in x 3.5in 14G Eave Strut	10' - 4 1/2"
EP05	6in x 3.5in 14G Eave Strut	10' - 6 1/4"
LBAP01	6in x 3.5in 14G Eave Strut	9' - 6 1/8"
LBAP02	6in x 3.5in 14G Eave Strut	9' - 10 3/8"
MF_H	12" x 12ga. CEE	11' - 3 1/4"
MF_V	12" x 12ga. CEE	12' - 8 1/2"
MF_VC	12" x 12ga. CEE	12' - 8 1/2"
OH01	4" x 16ga. CEE	2' - 0"
OH02	4" x 16ga. CEE	3' - 0"
OH03	4" x 16ga. CEE	3' - 4"
OH04	4" x 16ga. CEE	8' - 0"
OJ01	4" x 16ga. CEE	10' - 6"
OJ02	4" x 16ga. CEE	12' - 4"
OJ03	4" x 16ga. CEE	12' - 8 13/16"
OJ04	4in x 2in 16G Channel	7' - 7 1/2"
OJ05	4in x 2in 16G Channel	10' - 6"
OJ06	4in x 2in 16G Channel	12' - 4"
SG01	4" x 14ga. ZEE	9 1/2"
SG02	4" x 14ga. ZEE	1' - 2 1/2"
SG03	4" x 14ga. ZEE	1' - 7"
SG04	4" x 14ga. ZEE	1' - 9 1/2"
SG05	4" x 14ga. ZEE	2' - 1"
SG06	4" x 14ga. ZEE	3' - 2 1/2"
SG07	4" x 14ga. ZEE	3' - 6"
SG08	4" x 14ga. ZEE	3' - 6"
SG09	4" x 14ga. ZEE	3' - 7 1/4"
SG10	4" x 14ga. ZEE	3' - 9"
SG11	4" x 14ga. ZEE	3' - 9"
SG12	4" x 14ga. ZEE	4' - 6"
SG13	4" x 14ga. ZEE	4' - 8 1/2"
SG14	4" x 14ga. ZEE	4' - 11"
SG15	4" x 14ga. ZEE	6' - 6 1/4"
SG16	4" x 14ga. ZEE	7' - 5"
SG17	4" x 14ga. ZEE	8' - 2 1/2"
SG18	4" x 14ga. ZEE	9' - 6 1/8"
SG19	4" x 14ga. ZEE	9' - 10 3/8"
SG20	4" x 14ga. ZEE	10' - 8"
SG21	4" x 14ga. ZEE	10' - 9 1/4"
SG22	4" x 14ga. ZEE	10' - 9 1/4"
SG23	4" x 14ga. ZEE	10' - 9 3/4"
SG24	4" x 14ga. ZEE	10' - 11"

↑ OUTSIDE FLANGE OF GIRT POINTS UP
↓ OUTSIDE FLANGE OF GIRT POINTS DOWN

				
 <p>Moment Frame Vertical</p> <p>https://r.actbs.com/g/abs385</p>	 <p>Moment Frame Horizontal</p> <p>https://r.actbs.com/g/abs397</p>	 <p>Girt Column Single</p> <p>https://r.actbs.com/g/abs221</p>	 <p>Girt Column Double</p> <p>https://r.actbs.com/g/abs213</p>	 <p>Base Angle</p> <p>https://r.actbs.com/g/abs025</p>
				
 <p>Flybrace Single</p> <p>https://r.actbs.com/g/abs205</p>	 <p>Flybrace Double</p> <p>https://r.actbs.com/g/abs197</p>	 <p>Girt Flange Bracing</p> <p>https://r.actbs.com/g/abs249</p>	 <p>CEE Jamb Detail</p> <p>https://r.actbs.com/g/abs485</p>	 <p>CEE Jamb Base Detail</p> <p>https://r.actbs.com/g/abs493</p>
				
 <p>Channel Jamb Detail</p> <p>https://r.actbs.com/g/abs501</p>	 <p>Channel Jamb Base Detail</p> <p>https://r.actbs.com/g/abs495</p>	 <p>Jamb to Header Girt</p> <p>https://r.actbs.com/g/abs517</p>	 <p>Door Opening with Bracing</p> <p>https://r.actbs.com/g/abs435</p>	 <p>Window Opening with Bracing</p> <p>https://r.actbs.com/g/abs435</p>

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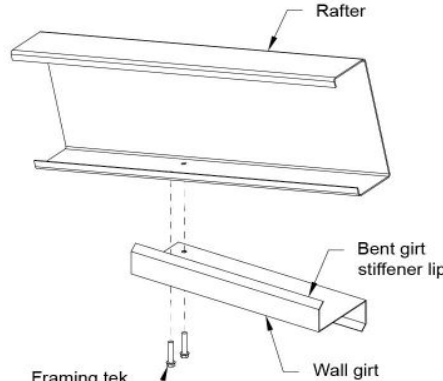
Corner-column

Girt clip

Wall girt

Framing tek screw

 Endwall Girt To Column <https://r.actbs.com/g/abs241>




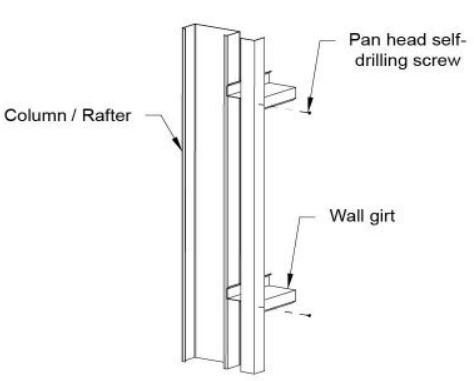
Rafter

Bent girt stiffener lip

Wall girt

Framing tek screw


 Endwall Girt To Rafter <https://r.actbs.com/g/abs233>



Column / Rafter

Pan head self-drilling screw

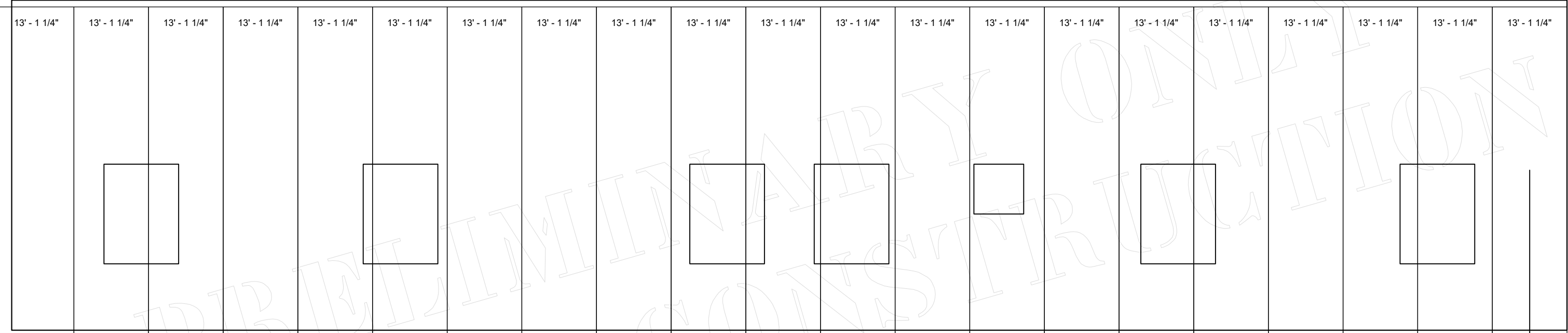
Wall girt

 Corner Angle <https://r.actbs.com/g/abs061>

PRELIMINARY ONLY
NOT FOR CONSTRUCTION

These are generic construction details - your exact building details may vary from these details. For example, washers are shown on many of the bolted connections, however the actual requirement for washer use is specified in the Engineering Plans. These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





←
Sheeting starts with this sheet and
moves across wall

1
22

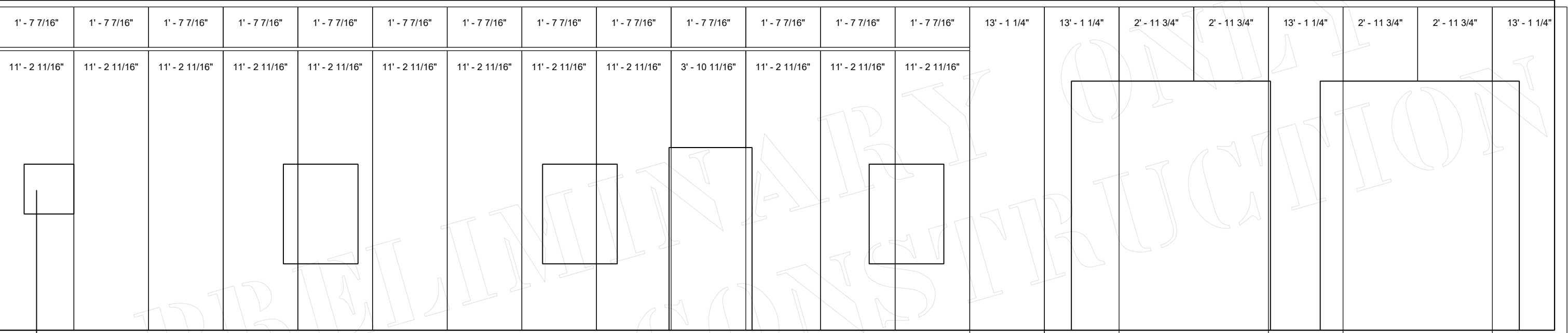
Sidewall A Sheeting Layout

SCALE: 1/4" = 1'-0"

Frame Line A

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





NOT FOR CONSTRUCTION

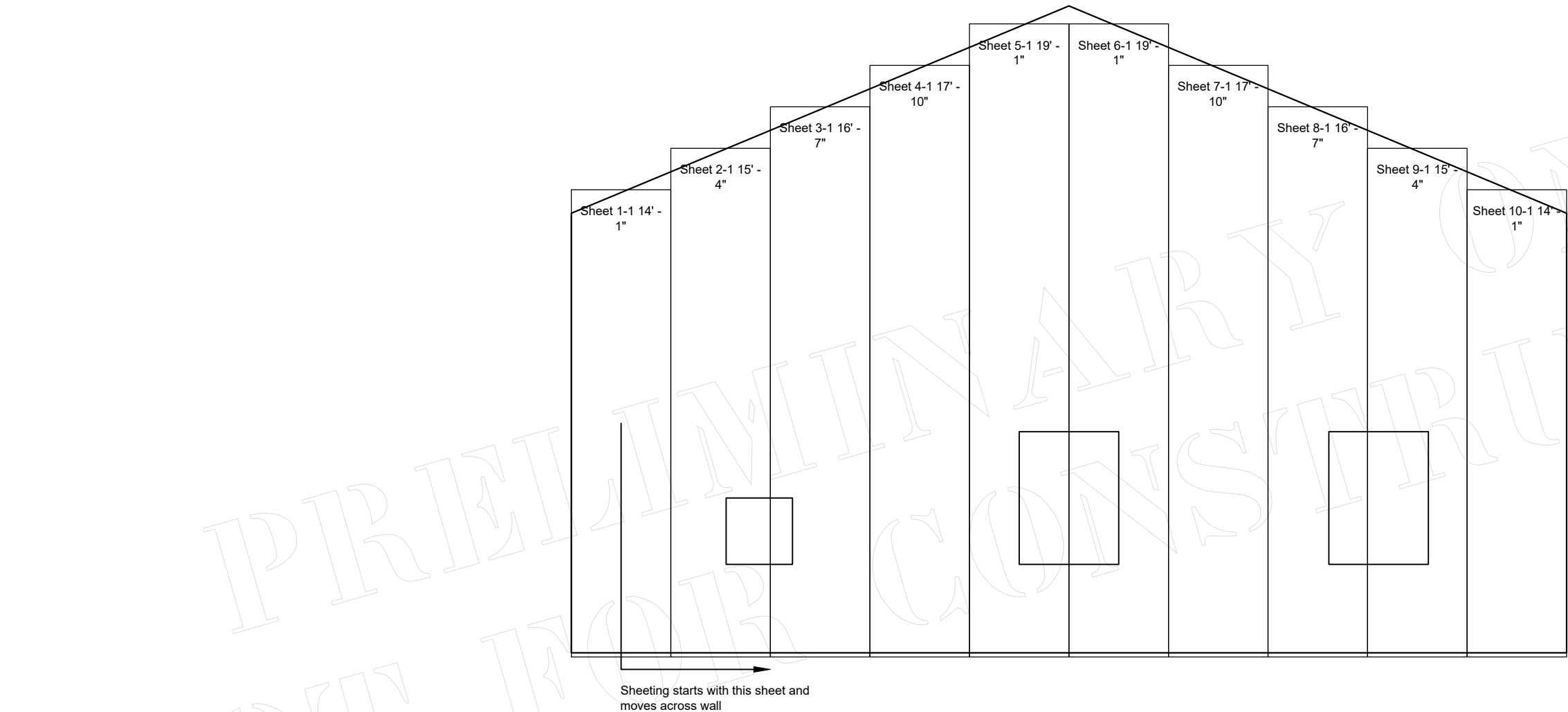
1
23

Sidewall B Sheeting Layout

SCALE: 1/4" = 1'-0"

Frame Line E

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



1
24

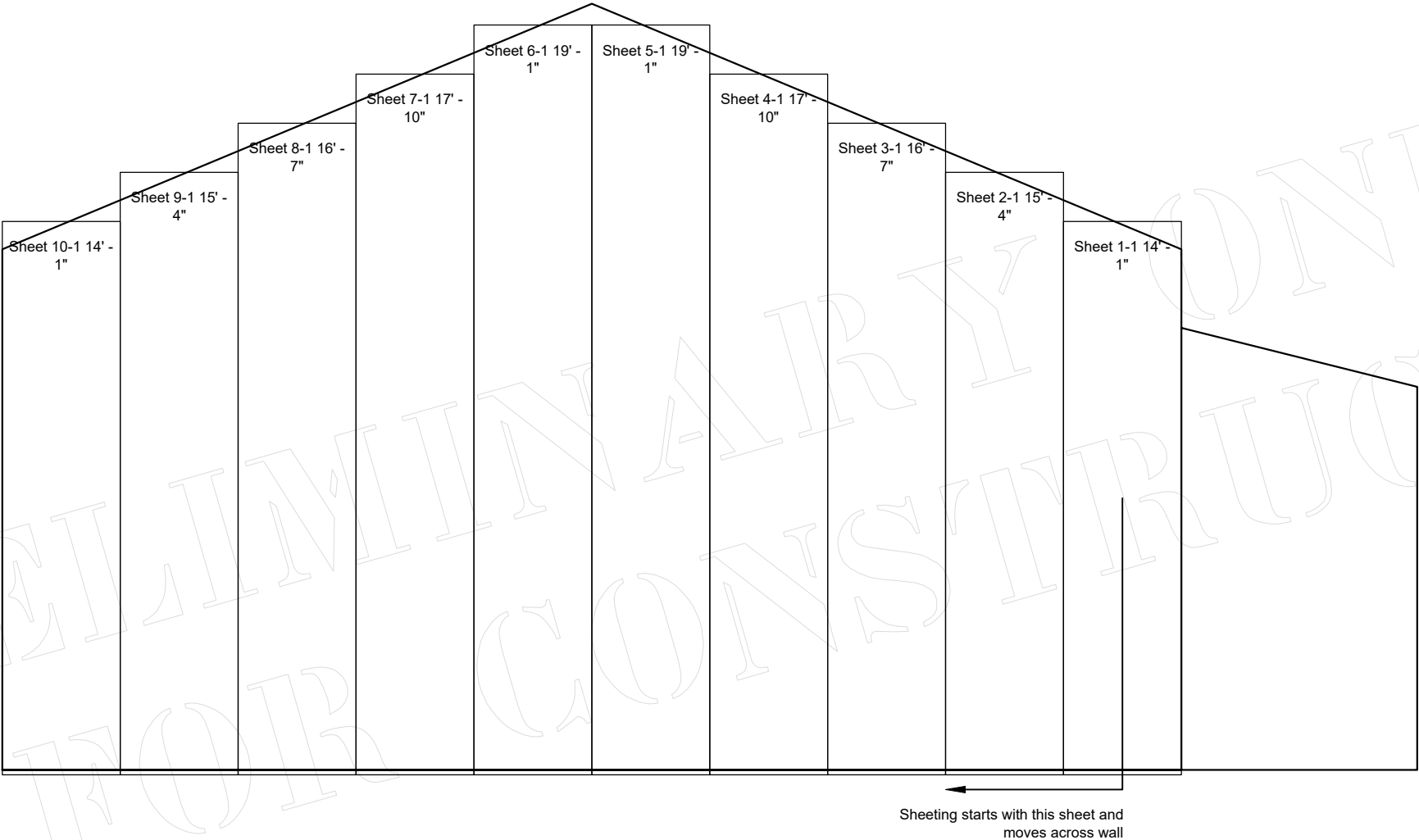
Endwall A Sheeting Layout

SCALE: 1/4" = 1'-0"

Frame Line 1

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





1
25

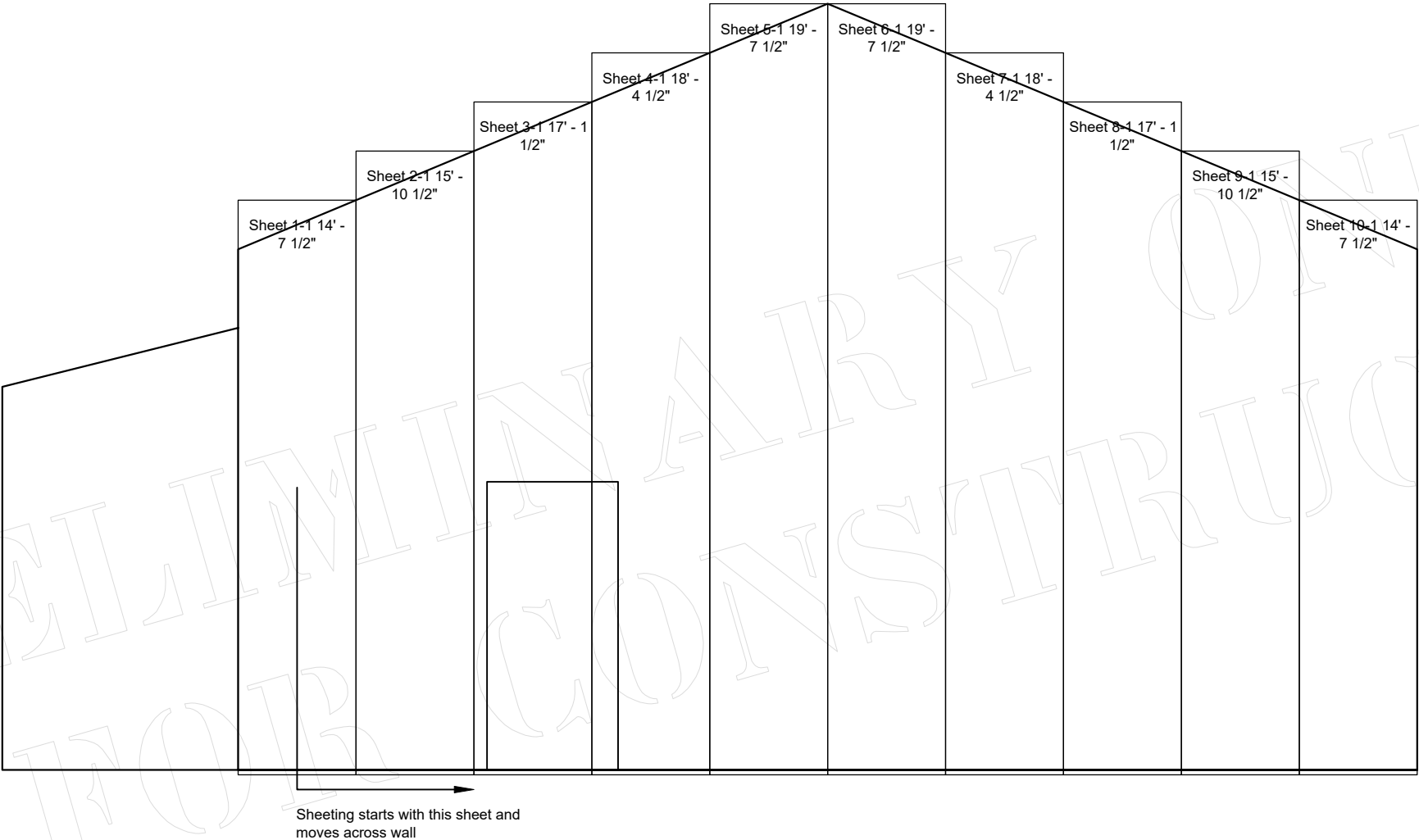
Endwall B Sheeting Layout

SCALE: 1/4" = 1'-0"

Frame Line 7

These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





1

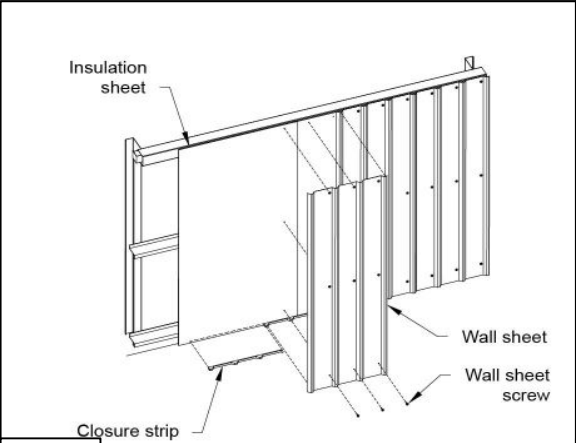
26


Partition Under Roof Frame 3 Sheeting Layout

SCALE: 1/4" = 1'-0"

Frame Line 3

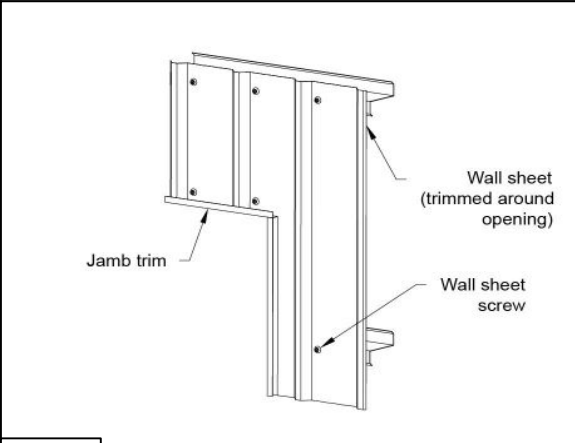
These illustrations are for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.






Wall Sheeting Overview

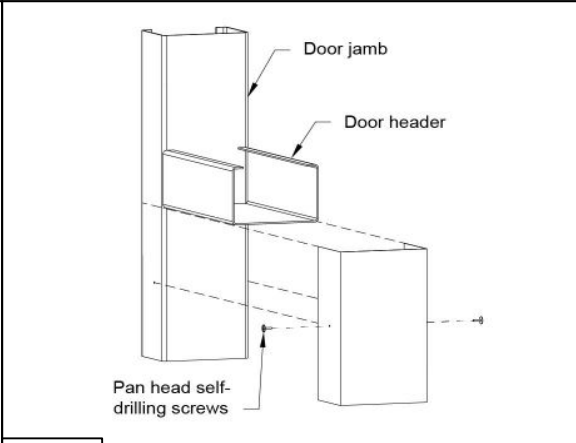
<https://r.actbs.com/g/abs537>






Wall Sheeting Openings

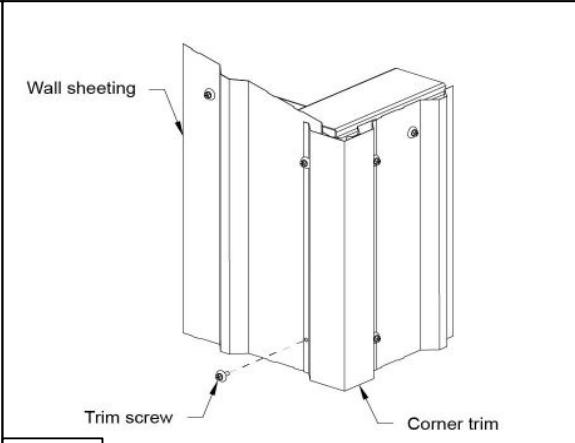
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Door Jamb Cover

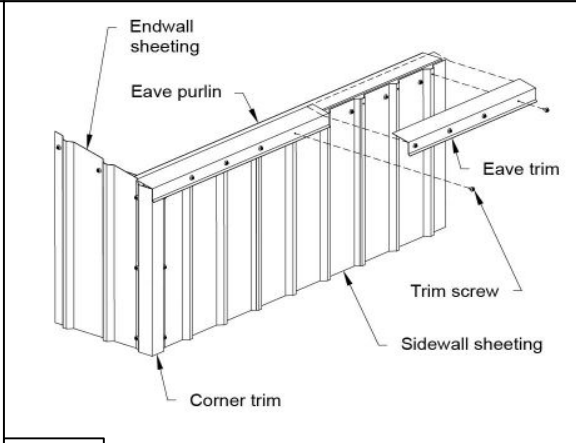
<https://r.actbs.com/g/abs069>






Corner Trim

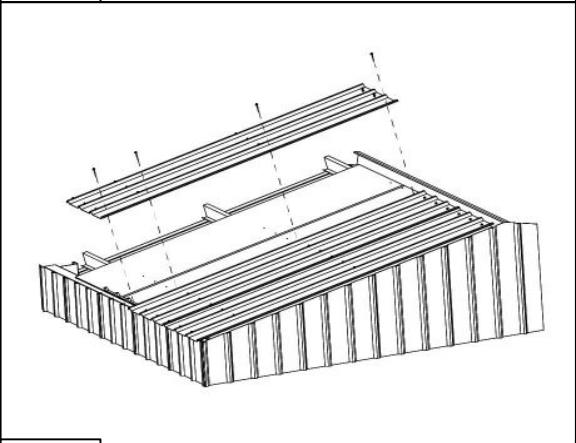
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Eave Trim

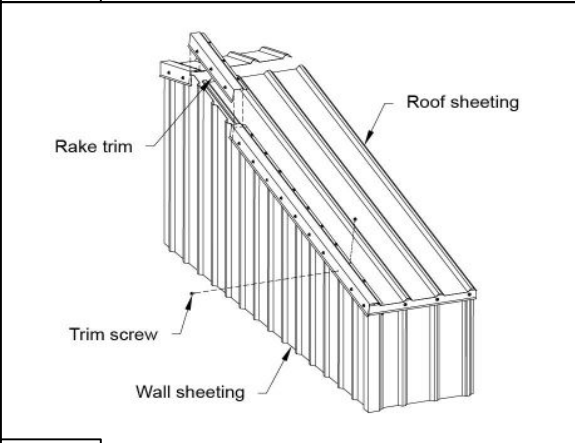
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Roof Sheeting

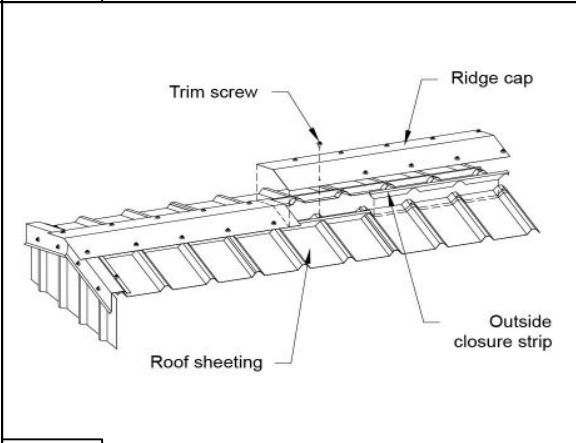
<https://r.actbs.com/g/abs477>






Rake Trim

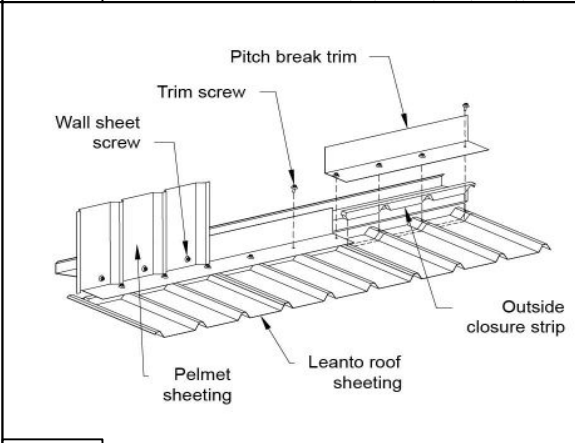
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Ridge Cap

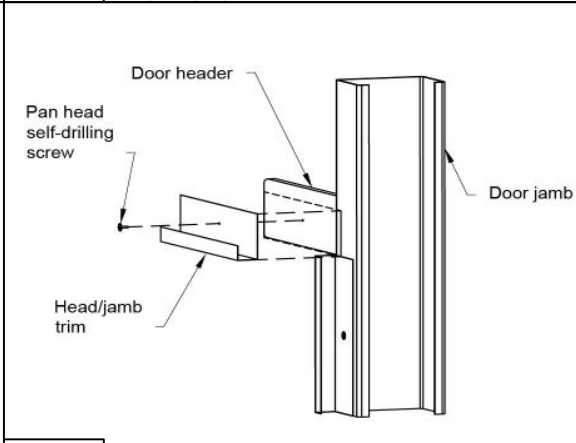
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Leanto Pitch Break Trim

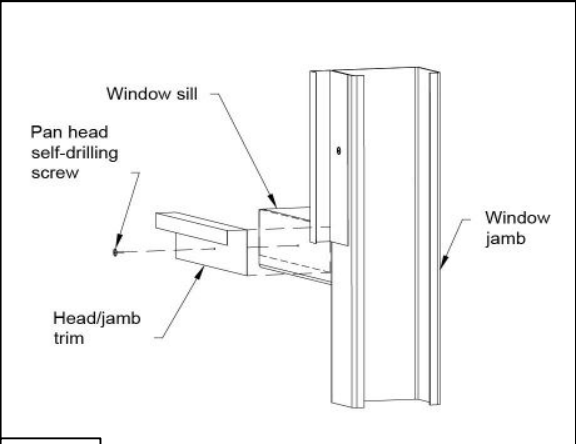
<https://r.actbs.com/g/abs437>






Jamb Trim Top

<https://r.actbs.com/g/abs277>





Jamb Trim Bottom

<https://r.actbs.com/g/abs273>


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Sheeting Layout Details

Robertson
BUILDING SYSTEMS
Part of the Cornerstone Building Brands Family

JOBNO VNUJ98779926
SHEET 27 of 28

DATE 8/20/2025
SCALE N/A



Generic Temporary Bracing Information

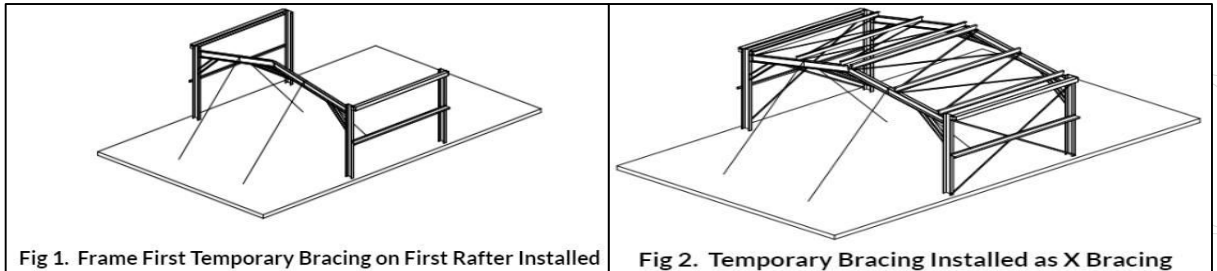
The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials

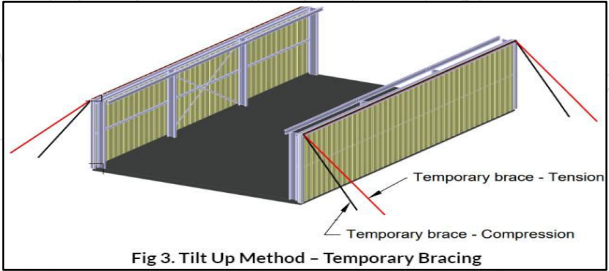
The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.



If the Tilt Up Method Is used (where walls are constructed on the ground And then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.



Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

Bracing Removal

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.aisc.org/> <https://www.metal-buildings-institute.org/>
Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.