

**GENERAL NOTES**

- 1.1 Fabrication shall be in accordance with A.S.C. standard practices in compliance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of the "AWS Structural Welding Code D1.1 and D1.3".
- 1.2 **MATERIALS**
- | MATERIALS                           | ASTM DESIGNATION | MIN. YIELD STRENGTH |
|-------------------------------------|------------------|---------------------|
| Hot Rolled Steel Shapes (W & C)     | A572             | Fy = 50 KSI         |
| Hot Rolled Steel Angles (L)         | A36              | Fy = 36 KSI         |
| Steel Pipes                         | A500             | Fy = 42 KSI         |
| Structural Tubing                   | A500             | Fy = 42 KSI         |
| Structural Steel Web Plate          | A572/A1011       | Fy = 50 KSI         |
| Structural Steel Flange Plates/Bars | A529/A572        | Fy = 55 KSI         |
| Cold Formed Light Gage              | A653/A1011       | Fy = 55 KSI         |
| Roof and Wall Sheets                | A792/A653        | Fy = 50, 80 KSI     |
| Cable Brace                         | A475 - TYPE 1    | Extra High Strength |
| Rod Brace                           | A529             | Fy = 50 KSI         |
- MIN. TENSILE STRENGTH**
- |                                       |                |              |
|---------------------------------------|----------------|--------------|
| Machine Bolts & Nuts                  | A307           | Fu = 60 KSI  |
| High Strength Bolts (1" and less)     | A325-TYPE 1    | Fu = 120 KSI |
| High Strength Bolts (>1" to 1 1/2")   | A325-TYPE 1    | Fu = 105 KSI |
| Anchor Bolts (Not supplied by A.S.C.) | A36/A307/F1554 | Fu = 60 KSI  |
- 1.3 **PRIMER**  
Shop primer paint is a rust inhibitive primer which meets the end performance of Federal Specification SSPC No. 15 and is A.S.C. Gray Oxide color. This paint is not intended for long term exposure to the elements. A.S.C. is not responsible for any deterioration of the shop primer paint as a result of improper handling and/or jobsite storage. A.S.C. shall not be responsible for any field applied paint and/or coatings. (AISC Code of Standard Practice, Latest Edition). Nominal thickness of primer will be 1 mil unless otherwise specified in contract documents.
- 1.4 **GALVANIZED OR SPECIAL COATINGS:**  
See Contract Documents
- 1.5 **ALL BOLTS ARE 1/2" x 0'-1 1/4" A307 EXCEPT:**  
a) Endwall rafter splice - 5/8" x 0'-1 3/4" A325-N  
b) Endwall column to rafter connection - 1/2" x 0'-1 1/4" A325 MIN.(SEE WALL ELEVATION)  
c) Main frame connections - SEE CROSS SECTION  
d) Flange Brace connections - 1/2" x 0'-1 1/4" A325  
NOTE: Washers are not supplied unless noted otherwise on drawing
- 1.6 **A325 BOLT TIGHTENING REQUIREMENTS**  
All high strength bolts are A325-N unless specifically noted otherwise. Holes are not slotted and design is bearing connection. Structural bolts shall be tightened by the turn-of-the-nut method in accordance with the Latest Edition AISC "Specification For Structural Joints" using ASTM A325 or A490 Bolts, when specifically required. A325-N bolts are supplied without washer unless otherwise noted on the drawings.  
All bolted connections unless noted are designed as bearing type connections with bolt threads not excluded from the shear plane.
- 1.7 **CLOSURE STRIPS ARE FURNISHED (IF ORDERED) FOR APPLICATION:**  
INSIDE - Under roof panels & base of wall panels  
OUTSIDE - Between roof panels & ridge cap  
- Between wall panels & eave/gable trim
- 1.8 **ERECTION NOTE:**  
All bracing, strapping, & bridging shown and provided by A.S.C. for this building is required and shall be installed by the erector as a permanent part of the structure. If additional bracing is required for stability during erection, it shall be the erector's responsibility to determine the amount of such bracing and to procure and install as needed.
- 1.9 **ERECTION AND UNLOADING NOT BY A.S.C.**
- 1.10 **SHORTAGES**  
Any claims or shortages by buyer must be made to A.S.C. within five (5) working days after delivery, or such claims will be considered to have been waived by the customer and disallowed.
- 1.11 **CORRECTIONS OF ERRORS AND REPAIRS (MBMA 6.10)**  
Claims for correction of alleged misfits will be disallowed unless A.S.C. shall have received prior notice thereof and allowed reasonable inspection of such misfits. The correction of minor misfits by the use of drift pins to draw the components into line, moderate amounts of reaming, chipping and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to claim. No part of the Building may be returned for alleged misfits without the prior approval of A.S.C.

**BUYER/END USE CUSTOMER RESPONSIBILITIES**

- 2.1 It is the responsibility of the BUYER/END USE CUSTOMER to obtain appropriate approvals and secure necessary permits from City, County, State, or Federal Agencies as required, and to advise/release A.S.C. to fabricate upon receiving such.
- 2.2 Armstrong Steel Corp (hereafter referred to as A.S.C.) standard specifications apply unless stipulated otherwise in the Contract Documents. A.S.C. design, fabrication, quality criteria, standards, practice, methods and tolerances shall govern the work with any other interpretations to the contrary notwithstanding. It is understood by both Parties that the BUYER/END USE CUSTOMER is responsible for clarification of inclusions or exclusions from the architectural plans and/or specifications.
- 2.3 In case of discrepancies between A.S.C. structural steel plans and plans for other trades, A.S.C. plans shall govern. (Section 3 AISC Code of Standard Practices, Latest Edition)
- 2.4 Approval of A.S.C. drawings and calculations indicates that A.S.C. has correctly interpreted and applied the Contract Documents. This approval constitutes the contractor/owners acceptance of the A.S.C. design concepts, assumptions, and loading. (Section 4 AISC Code and MBMA 3.3.3)
- 2.5 Once the BUYER/END USE CUSTOMER has signed A.S.C. Approval Package and the project is released for fabrication, changes shall be billed to the BUYER/END USE CUSTOMER including material, engineering and other costs. An additional fee may be charged if the project must be moved from the fabrication and shipping schedule.
- 2.6 The BUYER/END USE CUSTOMER is responsible for overall project coordination. All interface, compatibility, and design considerations concerning any materials not furnished by A.S.C. and A.S.C. steel system are to be considered and coordinated by the BUYER/END USE CUSTOMER. Specific design criteria concerning this interface between materials must be furnished before release for fabrication or A.S.C. assumptions will govern (AISC Code of Standard Practice, Latest Edition)



PHONE: 800-345-4610

www.armstrongsteel.com

**JOB NO. : 56632**

**CUSTOMER : JAMY WHITEMAN/FORTIFIED SOLUTIONS**

**END USER : JAMY WHITEMAN**

**END USE : GARAGE**

**LOCATION : 7445 MEADOWPINE DR**

**: BLACK FOREST, CO 80908**

**: EL PASO COUNTY**

**PH. NO. : 719-330-6681 EMAIL: JAMY@TRUSTFORTIFIED.COM**

**THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING AS INDICATED:**

**DESIGN LOADS:**

Design Code / Wind Code	: IBC-15
Building Risk Category	: II - Normal
Enclosure	: Closed
Dead Load (psf)	: 2.00
Collateral Load (psf)	: 12.00
Wind Load	
Ultimate Wind Speed, (Vult) (mph)	: 130.00
Wind Exposure	: C
Internal Pressure Coefficient, GCpi	: 0.18 / -0.18
Wall Panel Design Wind Pressure (psf)	: 40.00 / -43.40
Live Load	
Primary Framing (psf)	: 20.00
Trib. Area Reduction	: No
Secondary Framing (psf)	: 20.00
Snow Load	
Ground Snow Load, Pg (psf)	: 40.00
Roof Snow Load, Pf (psf)	: 32.00
Sloped Roof Snow Load, Ps (psf)	: 32.00
Snow Exposure Factor, Ce	: 1.00
Snow Importance Factor, Is	: 1.00
Thermal Factor, Ct	: 1.10
Sloped Factor, Cs	: 0.79

**Seismic Load**

Seismic Importance Factor, Ie	: 1.00
Site Class	: D
Mapped Spectral Response Acceleration	: Ss = 0.185 :S1 = 0.059
Spectral Response Coefficients	: Sds = 0.197 :Sd1 = 0.094
Seismic Design Category	: B
Basic Force Resisting Systems Used	: Steel System Not Specifically Detailed For Resistance
	: Rigid Frames (OMF)
	: Braced Frames (OCBF/OMF)
Total Design Base Shear, V (kips)	: Longitudinal = 3.42
	: Transverse = 3.84
Response Modification Factors, R	: Rigid Frames = 3.00 $\Omega = 3.00$
	: SW X-Bracing = 3.00 $\Omega = 2.00$
	: SW Wind Bent = 3.00 $\Omega = 3.00$
Seismic Response Coefficient, Cs	: Rigid Frames = 0.0658
	: SW X-Bracing = 0.0658
	: SW Wind Bent = 0.0658

Analysis Procedure Used : Equivalent Lateral Force Procedure  
Other Loads/Requirements

**BUILDING DESCRIPTION:**

Width (ft)	: 30
Length (ft)	: 40.08
Eave Ht. at BSW (ft)	: 19.50
Eave Ht. at FSW (ft)	: 19.50
Roof Slope at BSW	: 5:12
Roof Slope at FSW	: 5:12
Bay Spacing (ft)	: 2 at 20.04

**COVERING AND TRIMS:**

Roof Panels & Trims (By others)

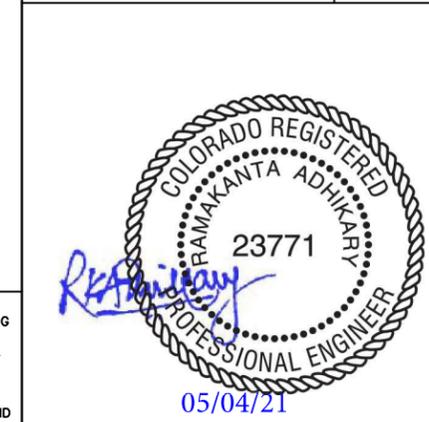
Wall Panel & Trims (By others)

**Insulation**

Roof Insulation	: 9.75 (R-30)
Wall Insulation	: 8.25 (R-25)

**Drawing Index**

Drawing Name	Page(s)
Drawing Cover	COVER
3D Reference	3D REF
Anchor Bolt Plan	1
Mezzanine Floor Plan	2
Anchor Bolt Details	3
Anchor Bolt Reactions	4
Rigid Frame	5-6
Front Sidewall	7
Back Sidewall	8
Left Endwall	9
Right Endwall	10
Roof Plan	11
Details	12-14



SEALING OF THIS DRAWING DOES NOT IMPLY OR CONSTITUTE THAT ARMSTRONG STEEL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT. ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY A.S.C. IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONE OTHER THAN ARMSTRONG ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS IMPLIED.

**BUYER/END USE CUSTOMER RESPONSIBILITIES CONTINUED**

- 2.7 It is the responsibility of the BUYER/END USE CUSTOMER to insure that A.S.C. plans comply with the applicable requirements of any governing building authorities. The supplying of sealed engineering data and drawings for the metal building system does not imply or constitute an agreement that A.S.C. or its design engineers are acting as the engineer of record or design professional for a construction project. These drawings are sealed only to certify the design of the structural components furnished by A.S.C.
- 2.8 The BUYER/END USE CUSTOMER is responsible for setting of anchor bolts and erection of steel in accordance with A.S.C. "For Construction" drawings only. Temporary supports such as guys, braces, falsework, cribbing or other elements required for the erection operation shall be determined furnished and installed by the erector. No items should be purchased from a preliminary set of drawings, including anchor bolts. Use only final "FOR CONSTRUCTION DRAWINGS" for this use. (AISC Code of Standard Practice, Latest Edition.)
- 2.9 Armstrong Steel Corp is responsible for the design of the anchor bolt to permit the transfer of forces between the base plate and the anchor bolt in shear, bearing and tension, but is not responsible for the transfer of anchor bolt forces to the concrete or the adequacy of the anchor bolt in relation to the concrete. Unless otherwise provided in the Order Documents, A.S.C. does not design and is not responsible for the design, material and construction of the foundation or foundation embedments. The END USE CUSTOMER should assure himself that adequate provisions are made in the foundation design for loads imposed by column reactions of the building, other imposed loads, and bearing capacity of the soil and other conditions of the building site. It is recommended that the anchorage and foundation of the building be designed by a Registered Professional Engineer experienced in the design of such structures. (Latest MBMA Low Rise Building Systems Manual)
- 2.10 Normal erection operations include the corrections of minor misfits by moderate amounts of reaming, chipping, welding or cutting, and the drawing of elements into line through the use of drift pins. Errors which cannot be corrected by the foregoing means or which require major changes in member configuration are to be reported immediately to A.S.C. by the BUYER/END USE CUSTOMER, to enable whoever is responsible either to correct the error or to approve the most efficient and economic method of correction to be used by others. (AISC Code of Standard Practice Latest Edition)
- 2.11 Neither the fabricator nor the BUYER/END USE CUSTOMER will cut, drill or otherwise alter his work, or the work of other trades, to accommodate other trades, unless such work is clearly specified in the contract documents. Whenever such work is specified, the BUYER/END USE CUSTOMER is responsible for furnishing complete information as to materials, size, location and number of alterations prior to preparation of shop drawings. (AISC Code of Standard Practice Latest Edition)
- 2.12 **WARNING:** In no case should Galvalume steel panels be used in conjunction with lead or copper. Both lead and copper have harmful corrosive effects on the Galvalume alloy coating when they are in contact with Galvalume steel panels. Even run-off from copper flashing, wiring, or tubing onto Galvalume should be avoided.
- 2.13 **SAFETY COMMITMENT:** Armstrong Steel Corp has a commitment to manufacture quality building components that can be safely erected. However, the safety commitment and job site practices of the erector are beyond the control of A.S.C. It is strongly recommended that safe working conditions and accident prevention practices be the top priority of any job site. Local, State, and Federal safety and health standards should always be followed to help insure workers safety. Make certain all employees know the safest and most productive way of erecting a building. Emergency procedures should be known to all employees. Daily meetings highlighting safety procedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended.
- 2.14 Roof drainage systems (gutter, downspouts, etc.) must be free of any obstruction to ensure smooth operation at any given time.
- 2.15 It is recommended by Factory Mutual (Reference: B2.44) that roofs be cleared of snow when half of the maximum snow depth is reached. The maximum snow depth can be estimated based on the design snow load and the density of snow and/or ice buildup. See Chart below.

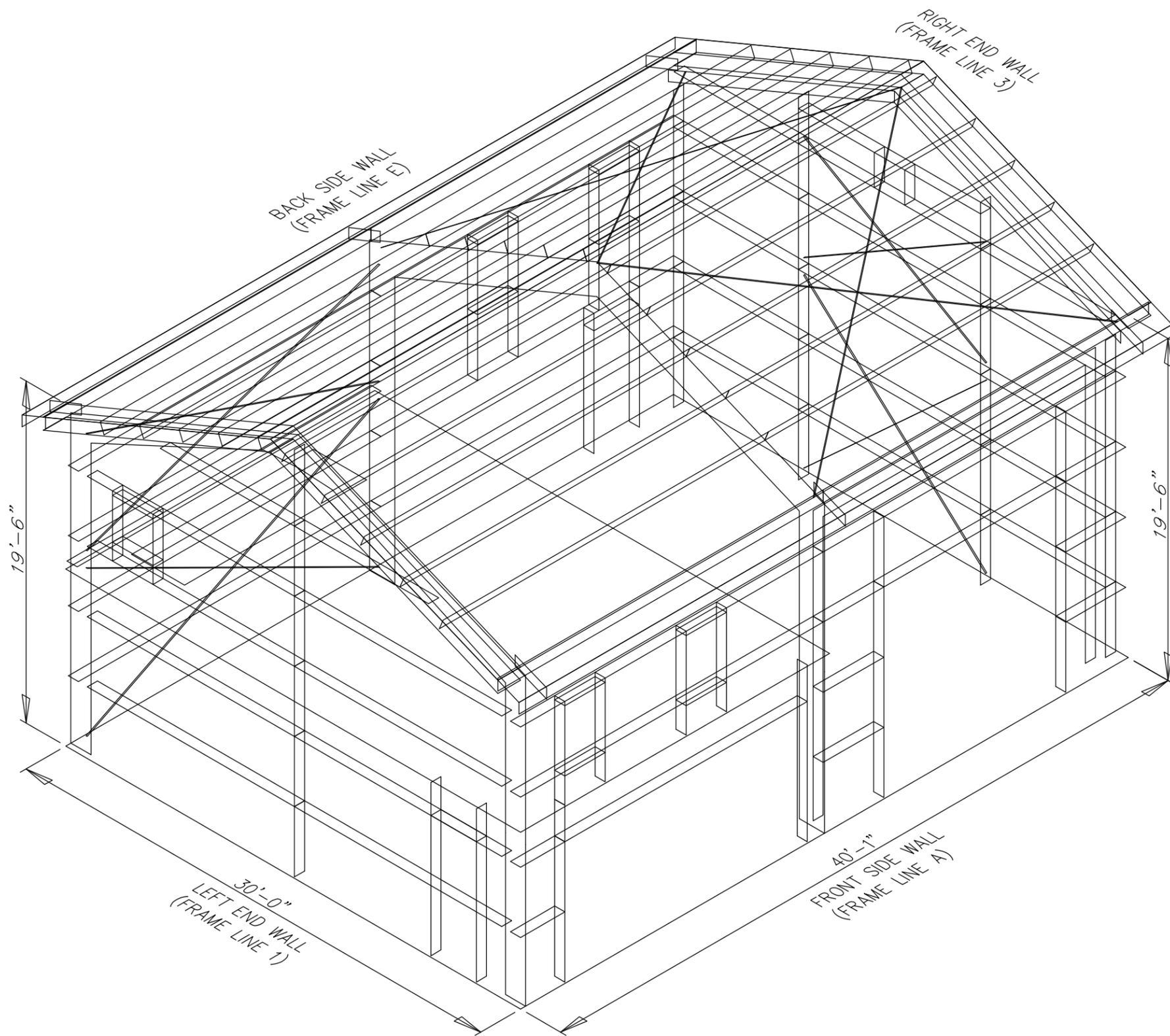
ROOF SNOW LOAD (IN PSF)	EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD START (IN INCHES)
20	16.60	8.30
25	17.25	8.62
30	17.90	8.95
35	18.55	9.28
40	19.20	9.60
45	19.85	9.92
50	20.50	10.25
55	21.15	10.58
60	21.80	10.90
65	22.45	11.22
70	23.10	11.55
75	23.75	11.88
80	24.40	12.20

NOTE:  
For Snow/Ice Removal Procedure, Refer to Metal Building System Manual 2002 Edition, Section AB.4, Page XI-AB-2.

**Drawing Status**

- APPROVAL:** These drawings, being for approval, are by definition not final, and are for conceptual representation only. their purpose is to confirm proper interpretation of the project documents. Only drawings issued "Construction" can be considered as complete.
- REVISED APPROVAL:**
- PERMIT:** These drawings, being for permit, are by definition not final. Only drawings issued "Construction" can be considered as complete.
- REVISED PERMIT:**
- CONSTRUCTION:** Final drawings to be used in the erection of the building.

JOB NO : 56632 JAMY WHITEMAN/FORTIFIED SOLUTIONS



NOTE:  
 3D IS A GENERAL REPRESENTATION OF BUILDING.  
 SOME MEMBERS MAY CHANGE IN FINAL ERECTION DRAWINGS

ELEVATION	PAGE
FRONT SIDEWALL (FRAME LINE A)	7 OF 14
BACK SIDEWALL (FRAME LINE E)	8 OF 14
LEFT ENDWALL (FRAME LINE 1)	9 OF 14
RIGHT ENDWALL (FRAME LINE 3)	10 OF 14

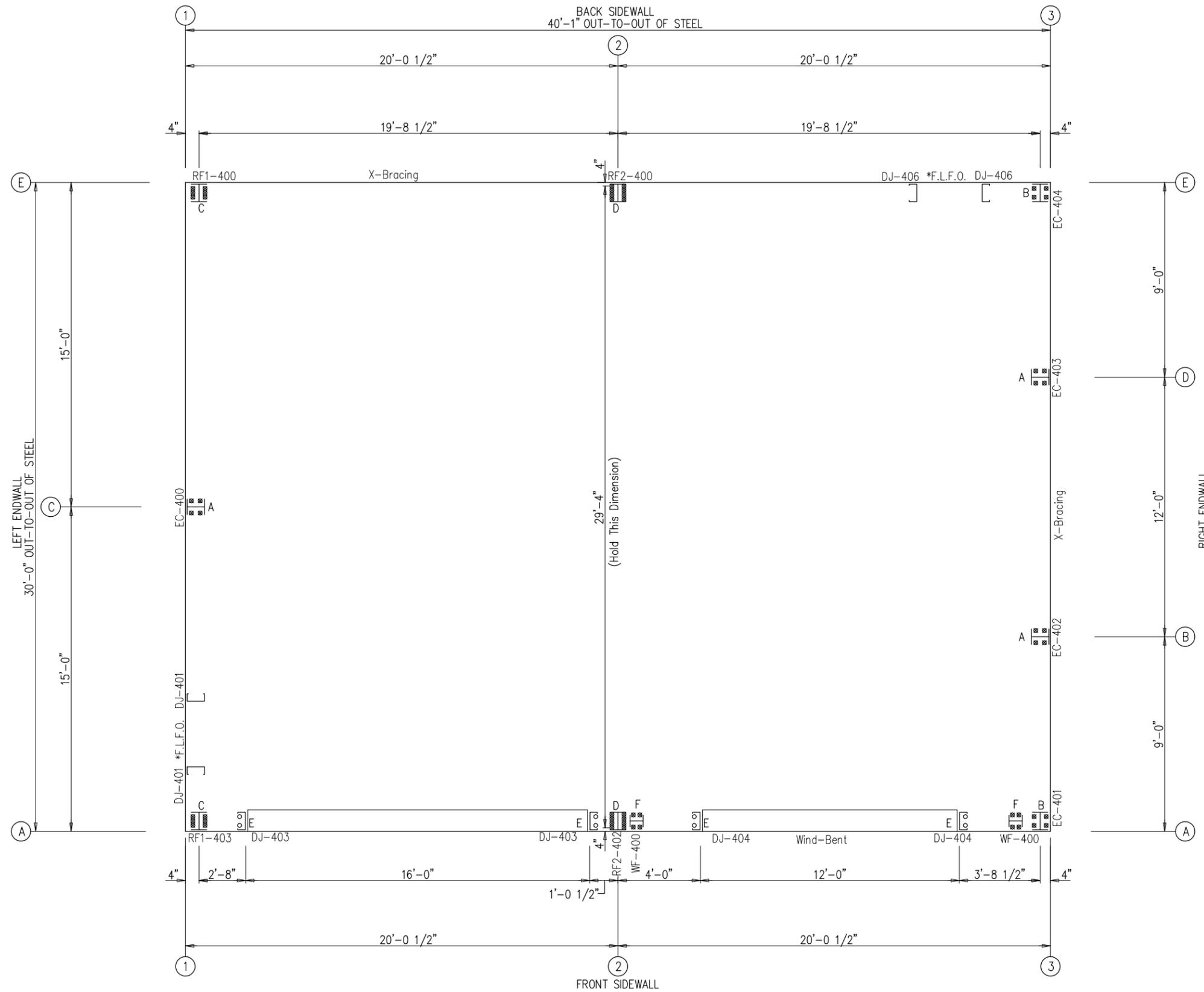


2 Inverness Drive East, Ste#200  
 Englewood, Colorado 80112  
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DESCRIPTION	ISOMETRIC VIEW	
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
SCALE	NOT TO SCALE	
JOB NO.: 56632	ENG. BY: RA	DATE: 04/16/21
	DWG. NO.: 3D REFERENCE	ISSUE: P

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type
8	Jamb	5/8"	A307
20	Endwall	3/4"	A307
28	Frame	3/4"	A307
8	WindCol	3/4"	A307



ANCHOR BOLT PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)  
\*F.L.F.O. Field Located Framed Opening

NOTE:  
MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



2 Inverness Drive East, Ste#200  
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DESCRIPTION	ANCHOR BOLT PLAN		
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS		
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS		
SCALE	NOT TO SCALE		
JOB NO.:	ENG. BY:	DATE:	
56632	RA	04/16/21	
	DWG. NO.:	ISSUE:	
	1 OF 14	P	

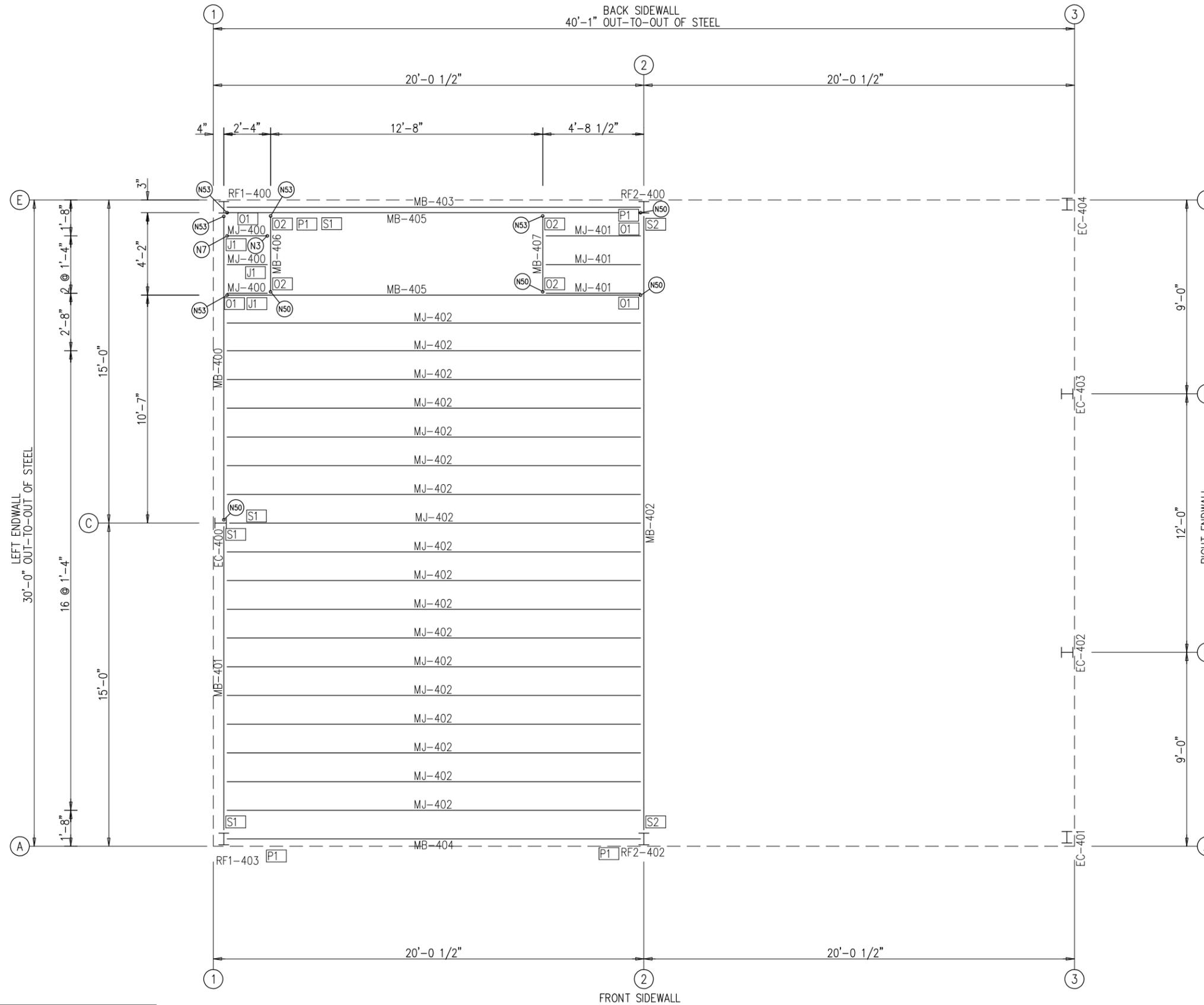
PERIMETER BEAM BOLT & PLATE TABLE					
ID	QUAN	TYPE	DIA	LENGTH	MARK/PART
P1	6	A325	5/8"	1 1/2"	m3

SUPPORT BEAM BOLT & PLATE TABLE					
ID	QUAN	TYPE	DIA	LENGTH	MARK/PART
S1	6	A325	5/8"	1 1/2"	m1
S2	6	A325	5/8"	1 1/2"	m2

OPENING BOLT & PLATE TABLE					
ID	QUAN	TYPE	DIA	LENGTH	MARK/PART
O1	6	A325	5/8"	1 1/2"	m4
O2	6	A325	5/8"	1 1/2"	m5

MEMBER TABLE				
QUAN	MARK	PART	LENGTH	
1	MB-400	W10531	13'-6 1/2"	
1	MB-401	W10531	13'-6 1/2"	
1	MB-402	W16851	26'-6"	
1	MB-403	W08531	19'-7 1/2"	
1	MB-404	W08531	19'-7 1/2"	
2	MB-405	W08531	19'-5"	
1	MB-406	W08531	3'-10 1/2"	
1	MB-407	W08531	3'-10 1/2"	
3	MJ-400	12K1	2'-11 1/2"	
3	MJ-401	12K1	5'-4"	
17	MJ-402	12K1	20'-4"	

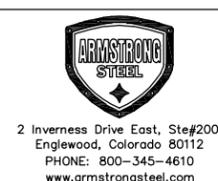
JOIST BOLT TABLE				
ID	QUAN	TYPE	DIA	LENGTH
J1	4	A307	1/2"	1 1/4"



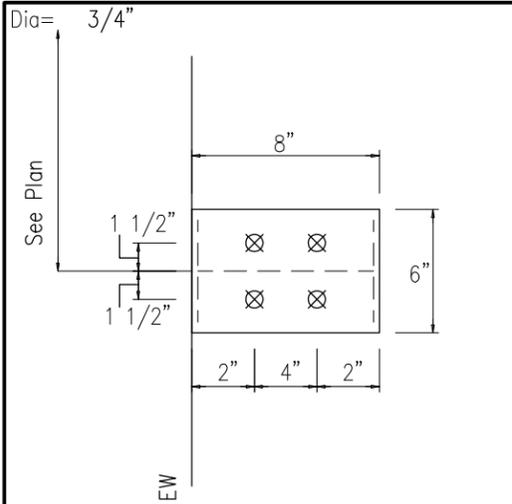
NOTE:  
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FLOOR FRAMING & JOISTS

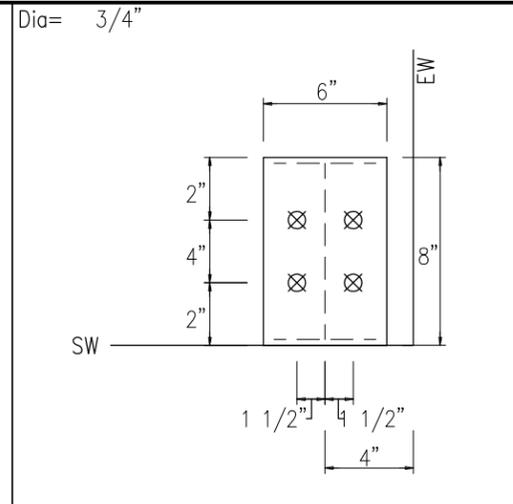
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	05/04/21	KK	SW	RA



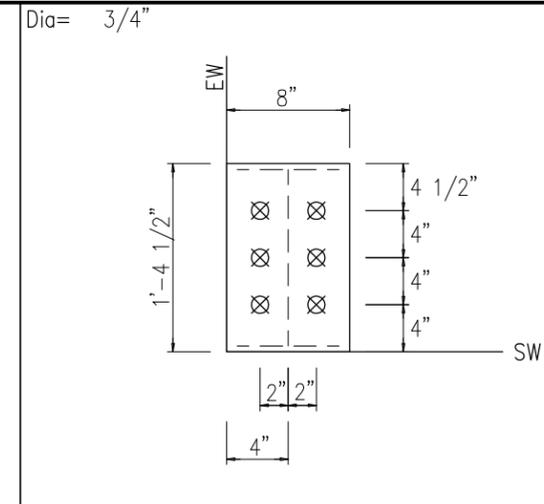
DESCRIPTION	FLOOR FRAMING & JOISTS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 2 OF 14 ISSUE: P



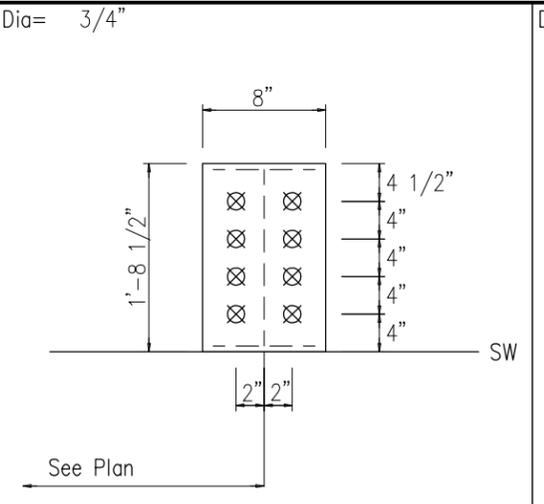
DETAIL A



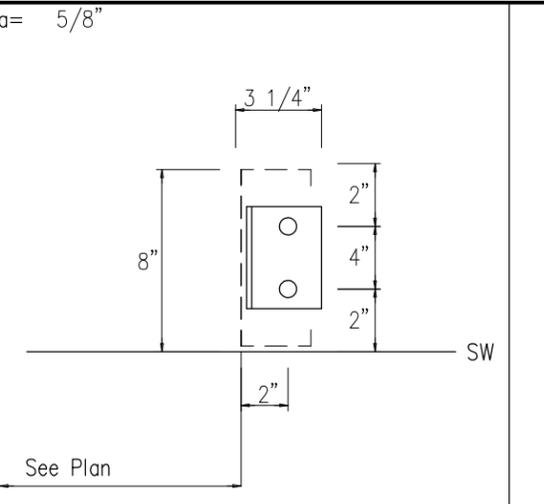
DETAIL B



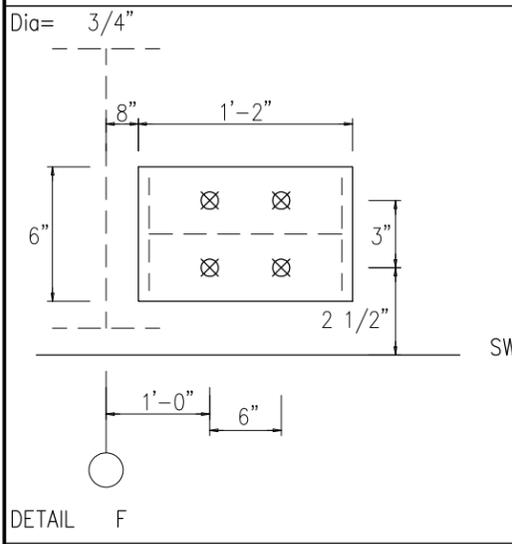
DETAIL C



DETAIL D



DETAIL E



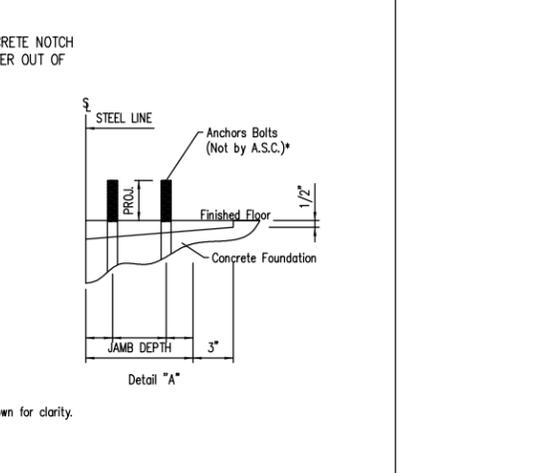
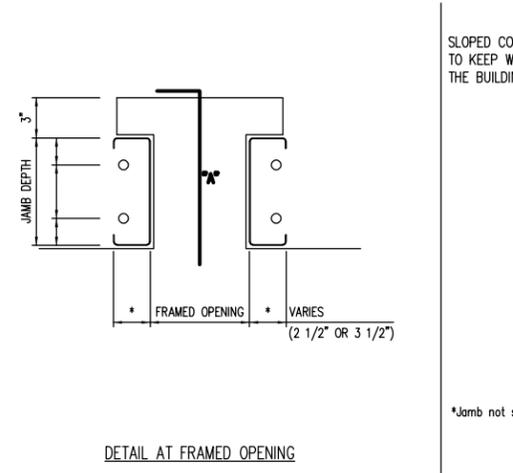
DETAIL F

NOTE:  
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ANCHOR BOLT DIAMETERS HAVE BEEN DESIGNED BY THE METAL BUILDING MANUFACTURER BASED ON AISC METHOD WITH COMBINED SHEAR AND TENSION.  
DEVELOPMENT, EMBEDMENT AND HOOK LENGTH OF ANCHOR BOLTS IN THE CONCRETE ARE DESIGN RESPONSIBILITY OF OTHERS. ALSO DESIGN OF SHEAR ANGLES, TENSION PLATES, HAIRPINS, AND ANY OTHER EMBEDDED MATERIAL IN THE CONCRETE SHALL BE DESIGNED AND PROVIDED BY OTHERS.  
NOTE: ANCHOR BOLT PROJECTION IS FROM BOTTOM OF BASE PLATE.

Anchor Bolt Diameter	Projection
1/2"	1 1/2"
5/8"	2"
3/4"	2 1/2"
7/8"	3 1/2"
1"	3 1/2"
1 1/8"	3 1/2"
1 1/4"	3 1/2"

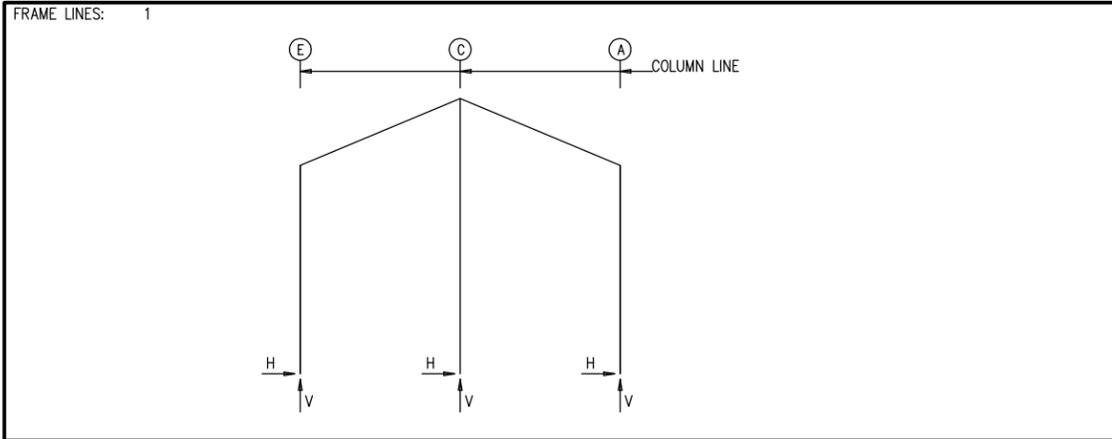
ANCHOR BOLT PROJECTION



ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	ANCHOR BOLT DETAILS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 3 OF 14 ISSUE: P



**RIGID FRAME: BASIC COLUMN REACTIONS (k)**

Frame Line	Column Line	---Dead---		---Collateral---		---Live---		---Floor---		---Snow---		---Wind_Left1---	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
1	E	0.1	4.3	0.0	1.4	-0.1	2.2	0.1	3.4	-0.1	4.0	-4.0	-6.6
1	A	-0.1	4.4	0.0	1.4	0.1	2.2	-0.1	3.5	0.1	4.0	-4.5	-0.2
1	C	0.0	6.9	0.0	2.2	0.0	3.4	0.0	5.7	0.0	5.4	-0.2	-3.4

Frame Line	Column Line	---Wind_Right1---		---Wind_Left2---		---Wind_Right2---		---Wind_Long1---		---Wind_Long2---		---Seismic_Left---	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
1	E	4.5	-0.2	-4.7	-5.0	3.9	1.3	1.5	-7.1	0.7	-7.4	-0.5	-0.7
1	A	4.0	-6.6	-3.9	1.3	4.7	-5.0	-0.7	-3.2	-1.5	-2.9	-0.5	0.7
1	C	0.2	-3.4	-0.2	-2.3	0.2	-2.3	0.0	-2.4	0.0	0.0	0.0	0.0

Frame Line	Column Line	Seismic_Right		---Seismic_Long---		F1UNB_SL_L-		F1UNB_SL_R-	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
1	E	0.5	0.7	0.0	-1.5	-0.1	3.1	-0.1	0.9
1	A	0.5	-0.7	0.0	0.0	0.1	0.9	0.1	3.1
1	C	0.0	0.0	0.0	0.0	0.0	4.6	0.0	4.6

Frame Line	Column Line	---Dead---		---Collateral---		---Live---		---Floor---		---Snow---		---Wind_Left1---	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2	E	0.1	8.3	-0.5	5.2	-0.8	8.1	0.3	6.3	-1.3	13.8	-6.7	-14.6
2	A	-0.1	8.4	0.5	5.2	0.8	8.1	-0.3	6.4	1.3	13.8	-8.9	-3.3

Frame Line	Column Line	---Wind_Right1---		---Wind_Left2---		---Wind_Right2---		---Wind_Long1---		---Wind_Long2---		---Seismic_Left---	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2	E	8.9	-3.3	-8.2	-10.0	7.3	1.3	3.7	-12.9	2.0	-13.5	-0.8	-1.1
2	A	6.7	-14.6	-7.3	1.3	8.2	-10.0	-2.0	-9.2	-3.7	-8.7	-0.8	1.1

Frame Line	Column Line	Seismic_Right		---Seismic_Long---		F2UNB_SL_L-		F2UNB_SL_R-	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2	E	0.8	1.1	0.0	-1.5	-1.1	11.5	-1.1	7.0
2	A	0.8	-1.1	0.0	0.0	1.1	7.0	1.1	11.5

**RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES**

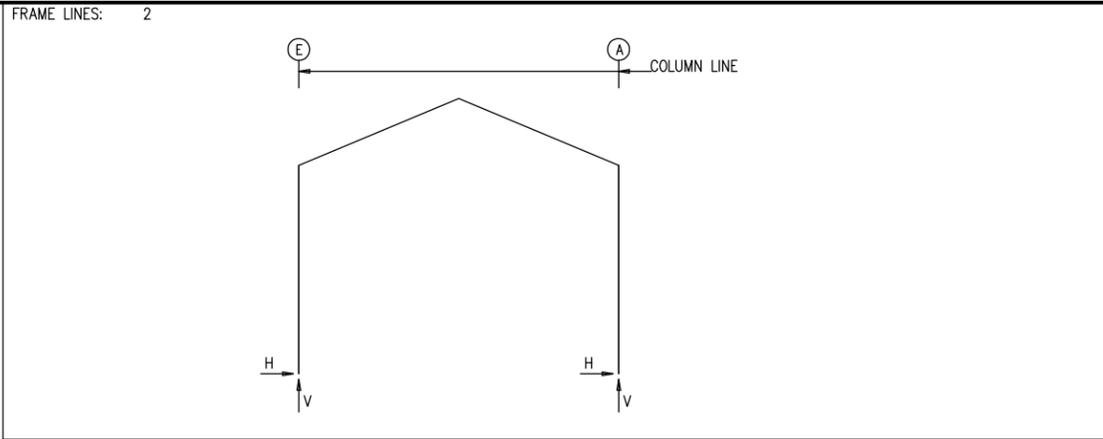
Frm Line	Col Line	Column_Reactions(k)				Bolt(in) Qty	Dia	Base_Plate(in)			Grout (in)		
		Load Id	Hmax H	V Vmax	V Vmin			Width	Length	Thick			
1	E	4	2.8	4.2	9	-2.8	-0.4	6	0.750	8.000	16.50	0.500	0.0
		6	1.7	11.9	11	0.5	-1.8						
1	A	10	2.8	-0.4	3	-2.8	4.3	6	0.750	8.000	16.50	0.500	0.0
		5	-1.7	12.1	8	2.4	-1.3						
1	C	8	0.1	2.1	7	-0.1	2.1	4	0.750	6.000	8.000	0.500	0.0
		2	0.0	17.4									

**RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES**

Frm Line	Col Line	Column_Reactions(k)				Bolt(in) Qty	Dia	Base_Plate(in)			Grout (in)		
		Load Id	Hmax H	V Vmax	V Vmin			Width	Length	Thick			
2	E	4	5.5	6.4	13	-5.0	14.3	8	0.750	8.000	20.50	0.500	0.0
		6	2.1	29.2	7	-3.9	-3.7						
2	A	12	5.0	14.4	3	-5.5	6.5	8	0.750	8.000	20.50	0.500	0.0
		5	-2.1	29.4	8	3.9	-3.7						

**WIND BENT REACTIONS**

Loc	Wall Line	Col Line	± Reactions				Bolt(in) Qty	Dia	Base_Plate(in)		Thick
			Wind(k) Horiz	Wind(k) Vert	Seismic(k) Horiz	Seismic(k) Vert			Width	Length	
F_SW	A	2	2.4	5.0	0.9	1.8	4	0.750	6.000	14.000	0.500
F_SW	A	3	2.4	5.0	0.9	1.8	4	0.750	6.000	14.000	0.500



**ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)**

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Floor Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horiz	Wind Suct Horiz	Wind Long1 Vert

Frm Line	Col Line	Wind Long2 Vert	Seis Left Vert	Seis Right Vert	E1UNB_SL_L-		E1UNB_SL_R-	
					Horz	Vert	Horz	Vert
1	C	-4.6	-0.5	-0.5	0.0	6.0	0.0	6.0

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1		Wind_Right1		Wind_Left2		Wind_Right2		Wind Press Horiz
						Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	
3	A	0.3	0.8	1.2	1.9	0.0	-1.7	0.0	-2.6	0.0	-0.4	0.0	-1.3	-3.0
3	B	0.7	1.8	2.7	4.3	-3.7	-10.5	0.0	4.4	-3.7	-9.6	0.0	5.3	-3.6
3	D	0.7	1.8	2.7	4.3	0.0	4.4	3.7	-10.5	0.0	5.3	3.7	-9.6	-3.6
3	E	0.3	0.8	1.2	1.9	0.0	-2.6	0.0	-1.7	0.0	-1.3	0.0	-0.4	-3.0

Frm Line	Col Line	Wind Suct Horiz	Wind_Long1		Wind_Long2		Seis_Left		Seis_Right		E2UNB_SL_L-		E2UNB_SL_R-	
			Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
3	A	3.3	0.0	-3.0	0.0	-2.2	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.4
3	B	3.9	0.0	-1.3	-1.1	-3.9	-1.1	-2.1	0.0	2.0	0.0	5.2	0.0	2.1
3	D	3.9	1.1	-3.9	0.0	-1.3	0.0	2.0	1.1	-2.1	0.0	2.1	0.0	5.2
3	E	3.3	0.0	-2.2	0.0	-3.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	1.7

**ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES**

Frm Line	Col Line	Load Id	Column_Reactions(k)			Bolt(in) Qty	Dia	Base_Plate(in)			Grout (in)		
			Load Id	Hmax H	V Vmax			V Vmin	Width	Length		Thick	
1	C *	14	3.7	0.6	15	-3.3	1.6						
		2	0.0	20.0									
3	A	16	2.0	-1.6	17	-1.8	-1.6	4	0.750	6.000	8.000	0.375	0.0
		1	0.0	3.0	16	2.0	-1.6						
3	B	18	2.4	-5.9	15	-2.1	-1.9	4	0.750	6.000	8.000	0.375	0.0
		19	1.8	8.7	18	2.4	-5.9						
3	D	14	2.4	-5.9	17	-2.1	-1.9	4	0.750	6.000	8.000	0.375	0.0
		20	1.8	8.7	14	2.4	-5.9						
3	E	21	2.0	-1.6	15	-1.8	-1.6	4	0.750	6.000	8.000	0.375	0.0
		1	0.0	3.0	21	2.0	-1.6						

\*See Rigid Frame Interior Column Reactions

**ANCHOR BOLT SUMMARY**

Qty	Locate	Dia (in)	Type
8	Jamb	5/8"	A307
20	Endwall	3/4"	A307
28	Frame	3/4"	A307
8	WindCol	3/4"	A307

**BUILDING BRACING REACTIONS**

Wall Loc	Col Line	± Reactions(k)				Panel_Shear (lb/ft)		Note
		Wind Horiz	Wind Vert	Seismic Horiz	Seismic Vert	Wind	Seis	
L_EW	1							(h)
F_SW	A	2,3						(a)
R_SW	J	B,D	3.7	6.7	1.1	2.0		
B_SW	E	2,1	4.8	4.3	1.7	1.5		

(a) Wind bent in bay  
(h) Rigid frame at endwall

**NOTES FOR REACTIONS**

Building reactions are based on the following building data:

- Width (ft) = 30.00
- Length (ft) = 40.10
- Eave Height (ft) = 19.50/19.50
- Roof Slope (rise/12) = 5.00/5.00
- Dead Load (psf) = 2.00
- Collateral Load (psf) = 12.00
- Live Load (psf) = 20.00
- Snow Load (psf) = 32.00
- Wind Speed (mph) (vult) = 130.00
- Wind Code = IBC-15
- Exposure = C
- Closed/Open = C
- Importance Wind = 1.00
- Importance Seismic = 1.00
- Seismic Zone = B
- Seismic Coeff (Fa\*Ss) = 0.30

ID	Description
1	Dead+Collateral+Snow+Slide_Snow
2	Dead+Collateral+0.75Snow+0.75Slide_Snow+0.75Floor_Live
3	Dead+0.6Wind_Left1
4	Dead+0.6Wind_Right1
5	Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Slide_Snow+0.75Floor_Live
6	Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Slide_Snow+0.75Floor_Live
7	0.6Dead+0.6Wind_Left1
8	0.6Dead+0.6Wind_Right1
9	0.6Dead+0.6Wind_Left2
10	0.6Dead+0.6Wind_Right2
11	0.6Dead+0.6Wind_Long2L
12	Dead+Collateral+0.45Wind_Right2+0.75F2UNB_SL_L
13	Dead+Collateral+0.45Wind_Left2+0.75F2UNB_SL_R
14	0.6Dead+0.6Wind_Right1+0.6Wind_Suction
15	0.6Dead+0.6Wind_Pressure+0.6Wind_Long2L
16	0.6Dead+0.6Wind_Suction+0.6Wind_Long1L
17	0.6Dead+0.6Wind_Pressure+0.6Wind_Long1L
18	0.6Dead+0.6Wind_Left1+0.6Wind_Suction
19	Dead+Collateral+0.45Wind_Right2+0.45Wind_Suction+0.75E2UNB_SL_L
20	Dead+Collateral+0.45Wind_Left2+0.45Wind_Suction+0.75E2UNB_SL_R
21	0.6Dead+0.6Wind_Suction+0.6Wind_Long2L

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA

2 Inverness Drive East, Ste#200  
Englewood, Colorado 80112  
PHONE: 800-345-4610  
www.armstrongsteel.com

DESCRIPTION	ANCHOR BOLT REACTIONS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO:	56632
ENG. BY:	RA
DATE:	04/16/21
DWG. NO.:	4 OF 14
ISSUE:	P



SPLICE BOLT TABLE							CAP PLATE BOLTS				
Mark	Qty		Int	Type	Dia	Length	Mark	Qty	Type	Dia	Length
	Top	Bot									
SP-1	4	4	2	A325	0.625	1.75	EC-400	4	A325	0.625	1.50
SP-2	4	4	0	A325	0.625	1.75					

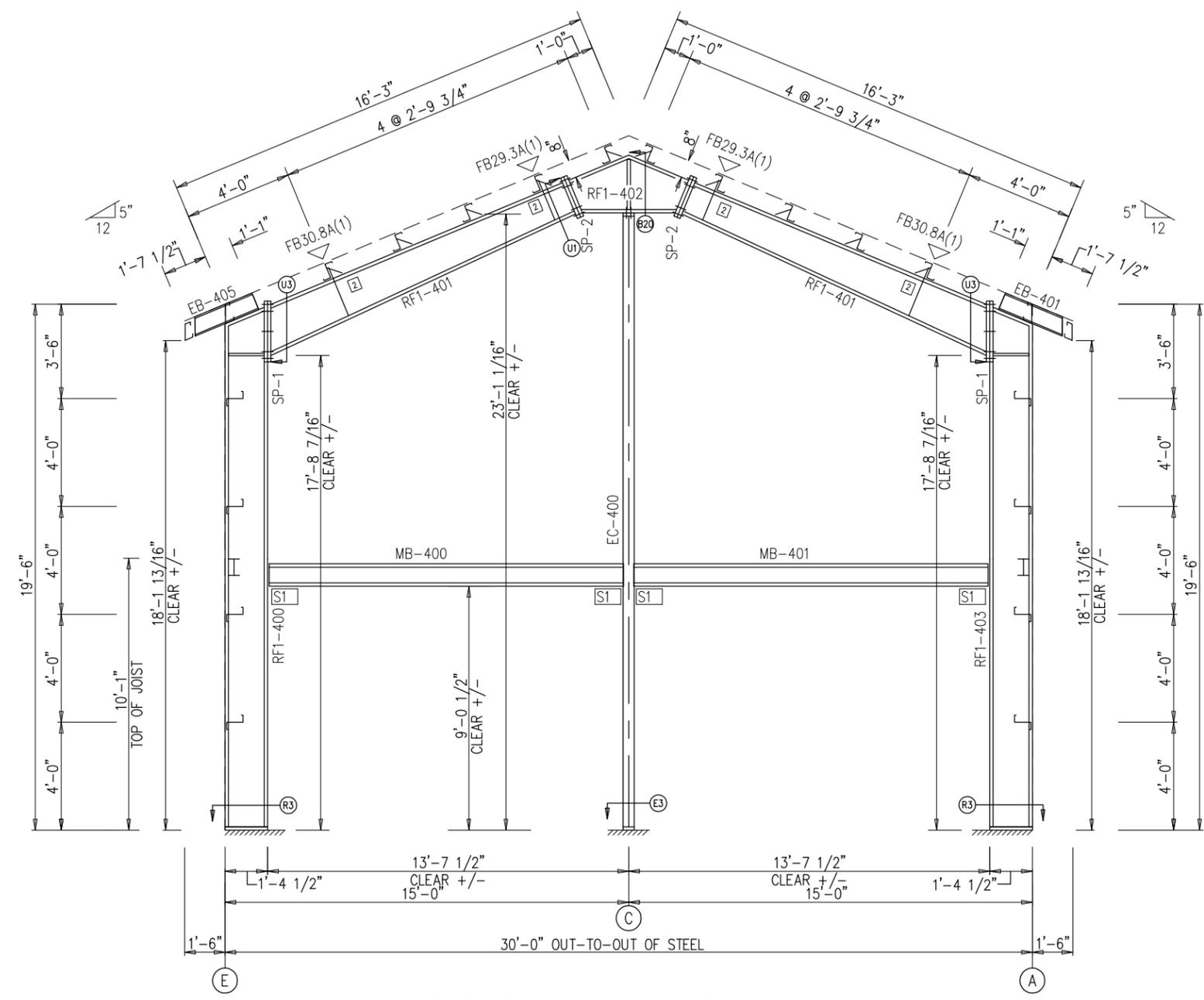
SUPPORT BEAM BOLT TABLE				
ID	Qty	Type	Dia	Length
S1	6	A325	0.625	1.50

▽ FLANGE BRACES: FBxx (1 or 2)  
 xx=length(in)  
 (1) One Side; (2) Two Sides  
 A - B316

MEMBER TABLE		Web Depth		Web Plate		Outside Flange		Inside Flange	
Mark	Start/End	Thick	Length	W x Thk x Length		W x Thk x Length		W x Thk x Length	
				RF1-400	16.0/16.0	0.135	19'-3 5/16"	8 x 1/4" x 18'-8 9/16"	8 x 1/4" x 17'-4"
RF1-401	18.0/12.0	0.135	12'-9 3/8"	8 x 1/4" x 1'-5 1/2"	6 x 1/4" x 12'-1 3/4"				
RF1-402	12.2/22.8	0.135	4'-7 5/16"	6 x 1/4" x 2'-6"	6 x 1/4" x 2'-6"				
RF1-403	16.0/16.0	0.135	19'-3 5/16"	8 x 1/4" x 1'-5 1/2"	8 x 1/4" x 17'-4"				
EC-400	W08659								
EB-401	W08531								
EB-405	W08531								

BEAM TABLE		
Mark	Part	Length
MB-400	W10531	13'-6 1/2"
MB-401	W10531	13'-6 1/2"

CONNECTION PLATES	
ID	Mark/Part
2	BC-46



RIGID FRAME ELEVATION: FRAME LINE 1



NOTE:  
 MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



2 Inverness Drive East, Ste#200  
 Englewood, Colorado 80112  
 PHONE: 800-345-4610  
 www.armstrongsteel.com

DESCRIPTION	RIGID FRAME ELEVATION	
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
SCALE	NOT TO SCALE	
JOB NO:	56632	DATE: 04/16/21
ENG. BY:	RA	ISSUE: P
DWG. NO.:	5 OF 14	

SPLICE BOLT TABLE						
Mark	Qty		Int	Type	Dia	Length
	Top	Bot				
SP-1	4	4	2	A325	0.625	2.25
SP-2	4	4	2	A325	0.625	1.75

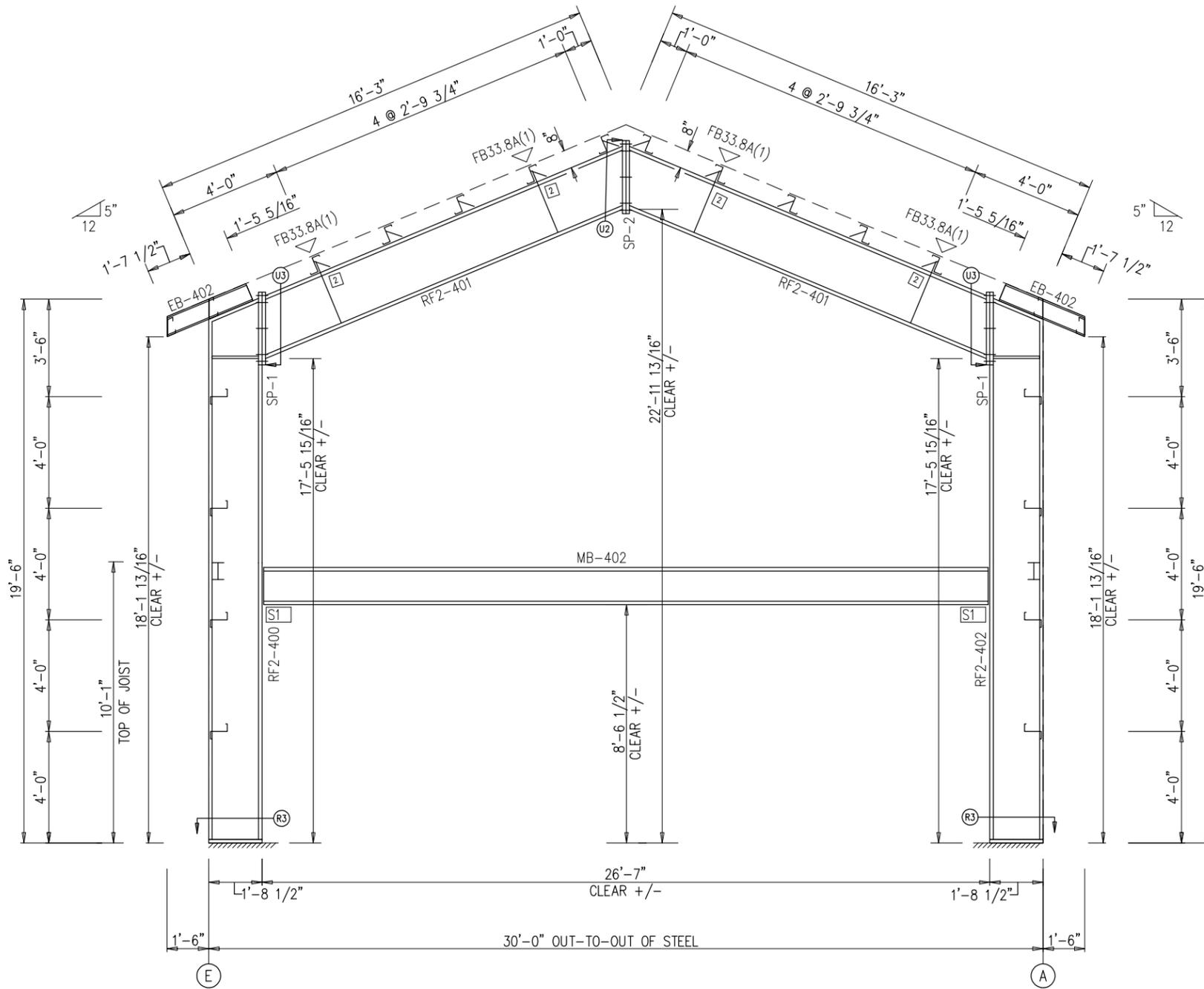
SUPPORT BEAM BOLT TABLE				
ID	Qty	Type	Dia	Length
S1	6	A325	0.625	1.50

▽ FLANGE BRACES: FBxx (1 or 2)  
 xx=length(in)  
 (1) One Side; (2) Two Sides  
 A - B316

MEMBER TABLE						
Mark	Web Depth		Web Plate		Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
	Start/End	Thick	Thick	Length		
RF2-400	20.0/20.0	0.135	0.135	16'-10 1/2"	8 x 1/4" x 18'-8 9/16"	8 x 1/4" x 17'-1 1/2"
RF2-401	20.0/20.0	0.150	0.150	2'-6 1/2"	8 x 1/4" x 1'-9 13/16"	6 x 1/4" x 14'-3 3/16"
	22.0/22.0	0.188	0.188	5'-1 7/16"	6 x 1/4" x 14'-3 3/16"	
RF2-402	22.0/22.0	0.135	0.135	9'-11"	8 x 1/4" x 1'-9 13/16"	8 x 1/4" x 17'-1 1/2"
	20.0/20.0	0.150	0.150	2'-6 9/16"		
EB-402	20.0/20.0	0.135	0.135	16'-10 1/2"	8 x 1/4" x 18'-8 9/16"	
	W08531					

BEAM TABLE		
Mark	Part	Length
MB-402	W16851	26'-6"

CONNECTION PLATES	
ID	Mark/Part
2	BC-46

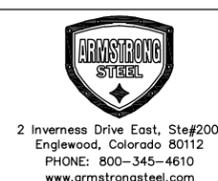


RIGID FRAME ELEVATION: FRAME LINE 2

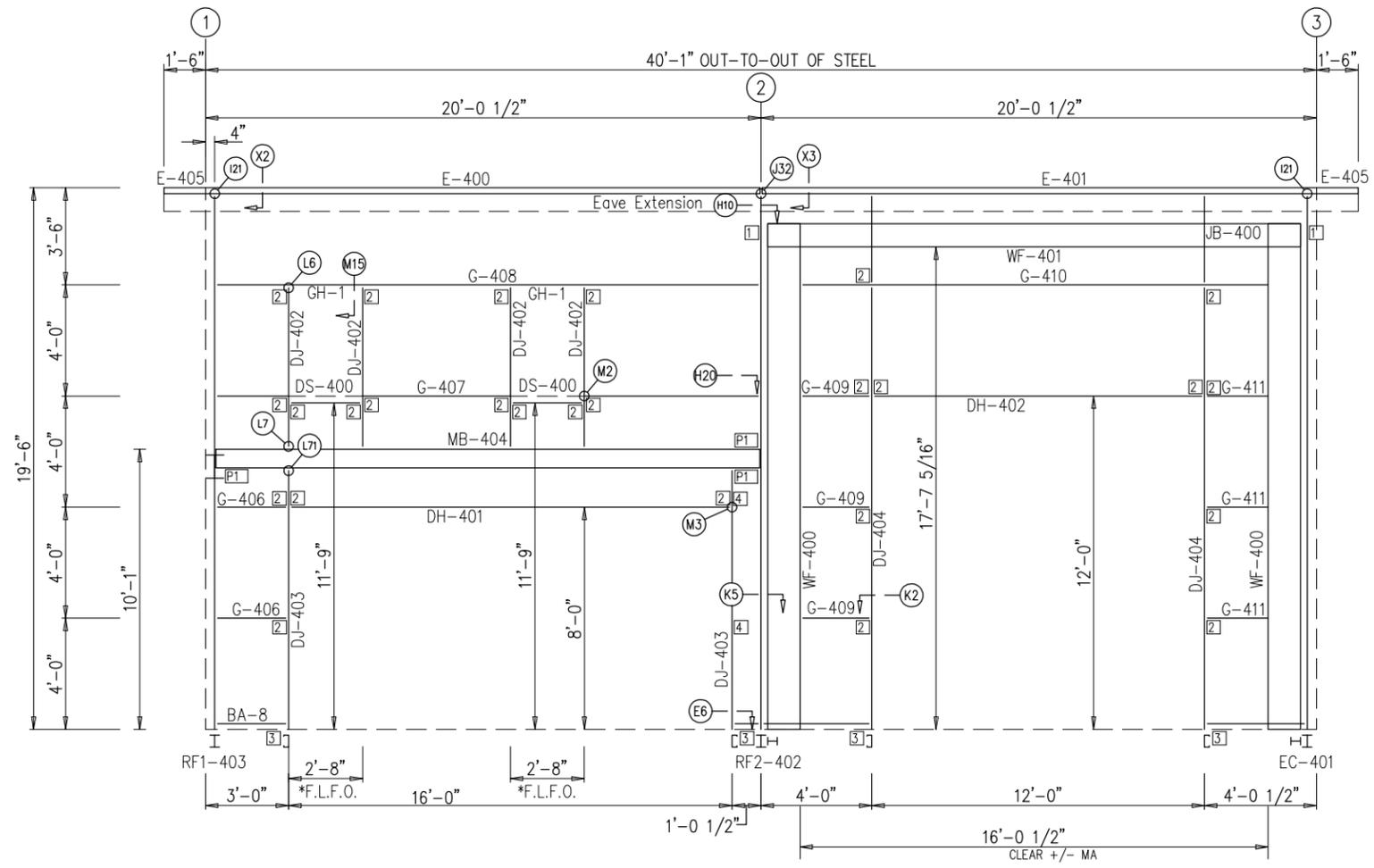


NOTE:  
 MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

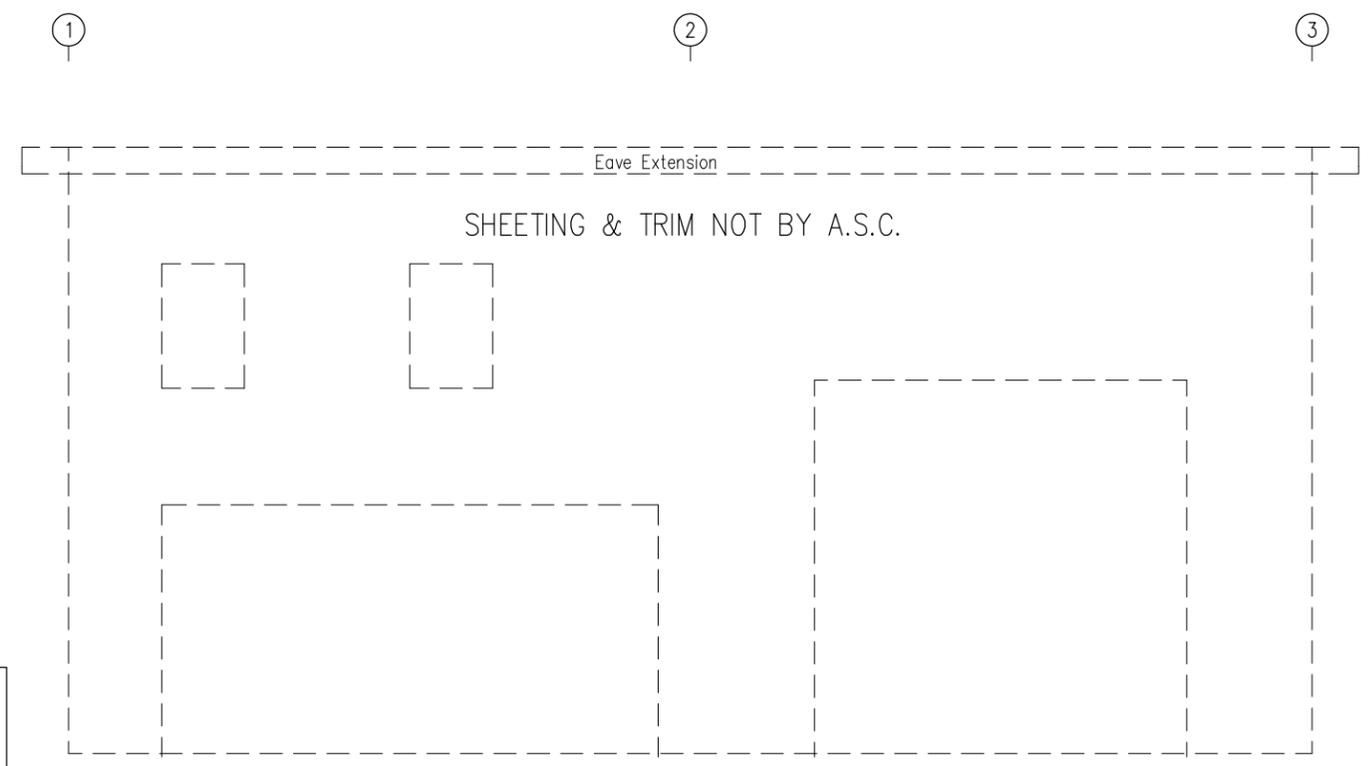
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	RIGID FRAME ELEVATION	
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS	
SCALE	NOT TO SCALE	
JOB NO.:	56632	ENG. BY: RA
DWG. NO.:	6 OF 14	DATE: 04/16/21
		ISSUE: P



FRONT SIDEWALL FRAMING: FRAME LINE A  
\*F.L.F.O. Field Located Framed Opening



FRONT SIDEWALL SHEETING: FRAME LINE A

**BOLT TABLE**  
FRAME LINE A

LOCATION	QUAN	TYPE	DIA	LENGTH
WF-400 - WF-401	8	A325	5/8"	2"
WF-400 - RF2-402	8	A325	5/8"	1 1/2"
WF-400 - EC-401	8	A325	5/8"	1 1/2"

**MEMBER TABLE**  
FRAME LINE A

QUAN	MARK	PART	LENGTH
2	WF-400	W14631	18'-5 5/16"
1	WF-401	W10631	15'-11 7/8"
4	DJ-402	8X25C16	5'-6 1/2"
2	DJ-403	8X25C16	9'-4 1/2"
2	DJ-404	8X35C14	15'-8"
1	DH-401	8X25C16	15'-11"
1	DH-402	8X25C16	11'-11"
2	DS-400	8X25C16	2'-7"
1	E-400	08226DU5	19'-0 1/2"
1	E-401	08226DU5	19'-0 1/2"
2	E-405	08226DU5	1'-5 1/2"
2	G-406	8X25Z16	1'-11 1/2"
1	G-407	8X25Z16	19'-0"
1	G-408	8X25Z12	18'-11 1/2"
3	G-409	8X25Z16	1'-9 1/2"
1	G-410	8X25ZN2	15'-7 1/2"
3	G-411	8X25Z16	1'-2"
1	MB-404	W08531	19'-7 1/2"
2	JB-400	8X25C16	2'-4 3/4"

**PERIMETER BEAM BOLT TABLE**  
FRAME LINE A

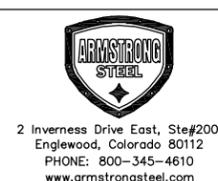
ID	QUAN	TYPE	DIA	LENGTH	QUAN
P1	6	A325	5/8"	1 1/2"	4

**CONNECTION PLATES**  
FRAME LINE A

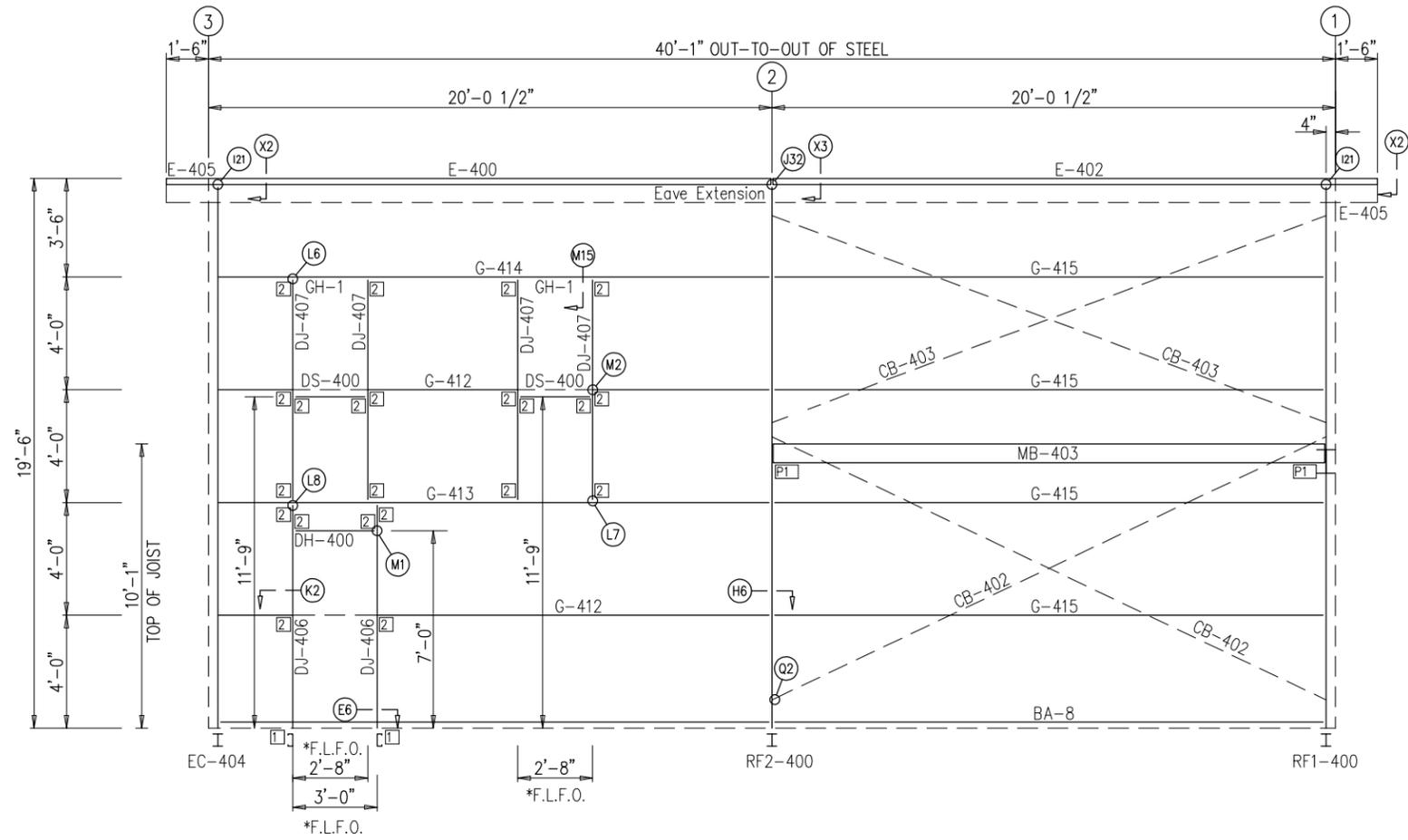
ID	QUAN	MARK/PART
1	2	BC-49
2	28	BC-01
3	4	BC-05
4	2	b403
5	2	BC-37F

NOTE:  
MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

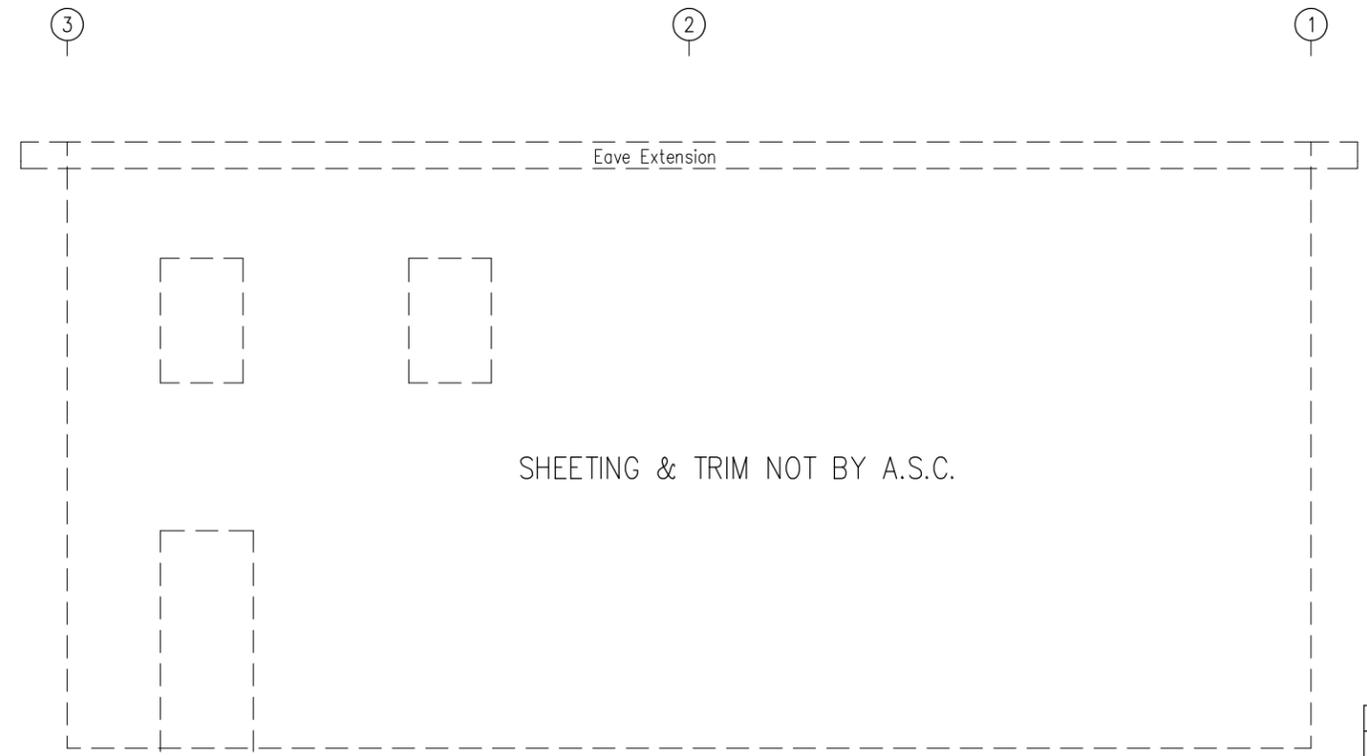
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	SIDEWALL FRAMING
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 7 OF 14 ISSUE: P



BACK SIDEWALL FRAMING: FRAME LINE E  
\*F.L.F.O. Field Located Framed Opening



BACK SIDEWALL SHEETING: FRAME LINE E

MEMBER TABLE			
FRAME LINE E			
QUAN	MARK	PART	LENGTH
2	DJ-406	8X25C16	7'-8"
4	DJ-407	8X25C16	7'-4"
1	DH-400	8X25C16	2'-11"
2	DS-400	8X25C16	2'-7"
1	E-400	08226DU5	19'-0 1/2"
1	E-402	08226DU5	19'-0 1/2"
2	E-405	08226DU5	1'-5 1/2"
2	G-412	8X25Z16	19'-0"
1	G-413	8X25ZN2	19'-0"
1	G-414	8X25Z12	19'-0"
4	G-415	8X25Z14	18'-11 1/2"
1	G-416	8x35Z14	19'-0 1/2"
2	CB-402	GS1716	22'-2 1/4"
2	CB-403	GS1716	21'-6 1/2"
1	MB-403	W08531	19'-7 1/2"

PERIMETER BEAM BOLT TABLE					
FRAME LINE E					
ID	QUAN	TYPE	DIA	LENGTH	QUAN
P1	6	A325	5/8"	1 1/2"	4

CONNECTION PLATES			
FRAME LINE E			
ID	QUAN	MARK/PART	
1	2	BC-05	
2	22	BC-01	

NOTE:  
MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



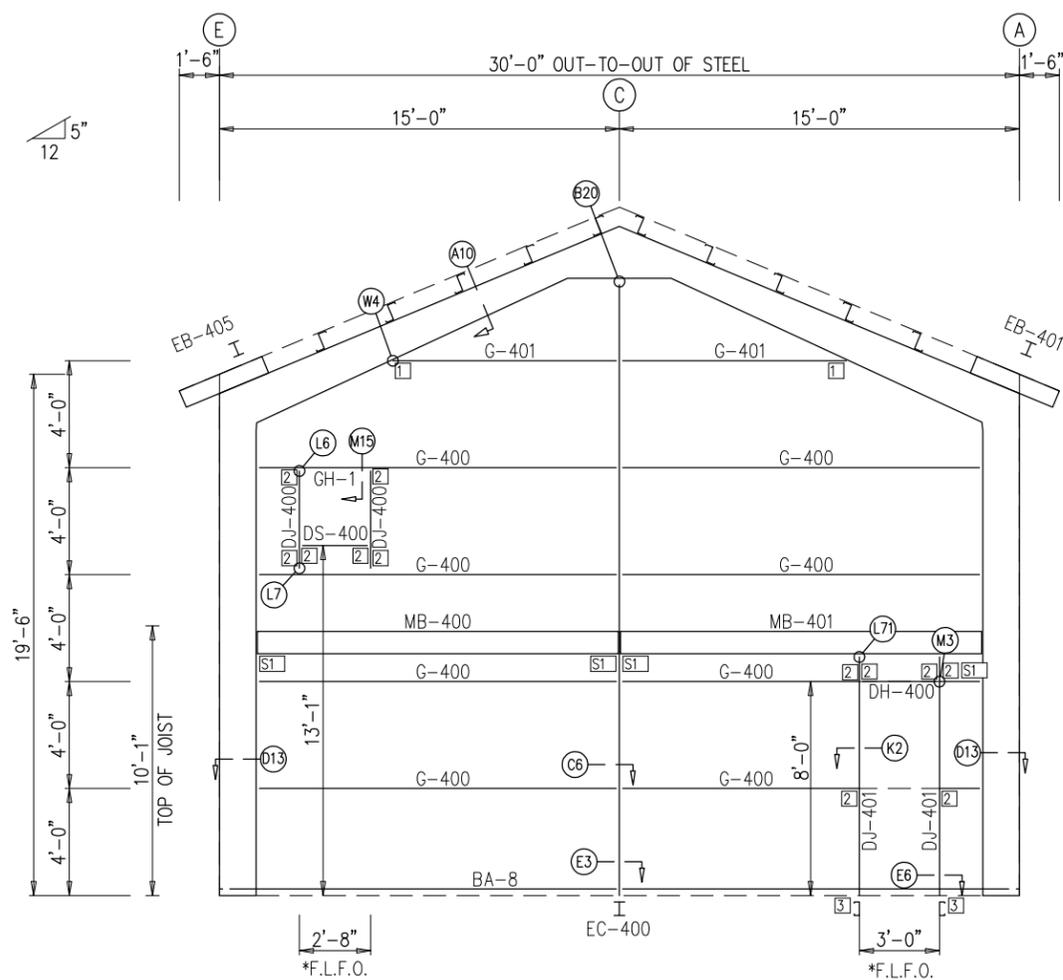
DESCRIPTION	SIDEWALL FRAMING
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 8 OF 14 ISSUE: P

BOLT TABLE				
FRAME LINE 1				
LOCATION	QUAN	TYPE	DIA	LENGTH
Columns/Raf	4	A325	5/8"	1 1/2"

MEMBER TABLE				
FRAME LINE 1				
QUAN	MARK	PART	LENGTH	
1	EB-401	W08531	2'-11 13/16"	
1	EB-405	W08531	2'-11 13/16"	
1	EC-400	W08659	23'-1 1/16"	
2	DJ-400	8X25C16	3'-4"	
2	DJ-401	8X25C16	9'-0"	
1	DH-400	8X25C16	2'-11"	
1	DS-400	8X25C16	2'-7"	
8	G-400	8X25Z16	13'-3"	
2	G-401	8X25Z16	8'-2 7/8"	
1	MB-400	W10531	13'-6 1/2"	
1	MB-401	W10531	13'-6 1/2"	

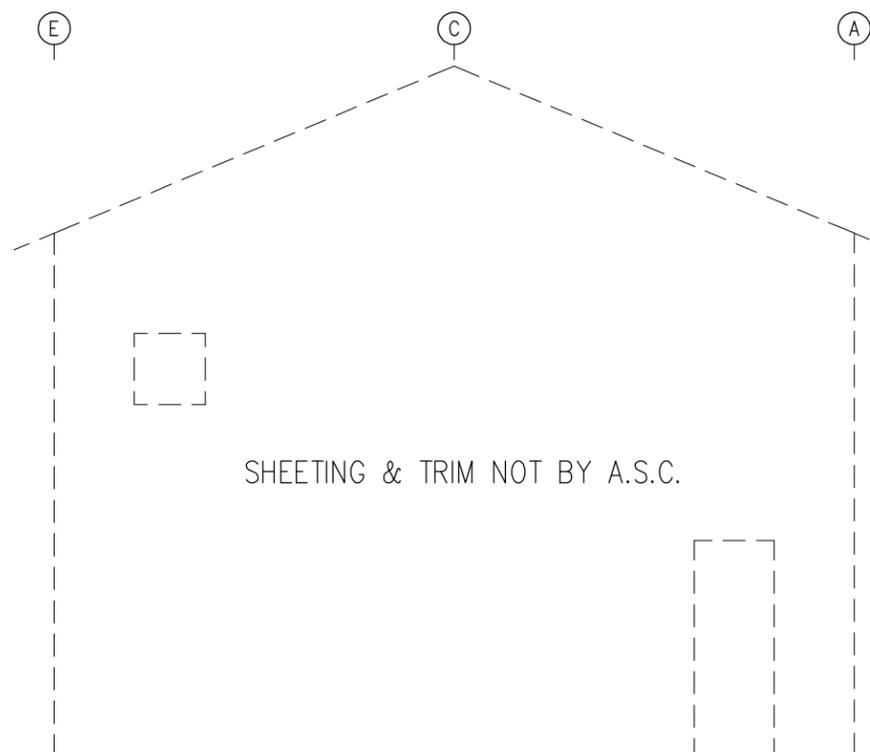
SUPPORT BEAM BOLT TABLE					
FRAME LINE 1					
ID	QUAN	TYPE	DIA	LENGTH	QUAN
S1	6	A325	5/8"	1 1/2"	8

CONNECTION PLATES		
FRAME LINE 1		
ID	QUAN	MARK/PART
1	2	b400
2	12	BC-01
3	2	BC-05



LEFT ENDWALL FRAMING: FRAME LINE 1

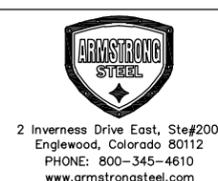
\*F.L.F.O. Field Located Framed Opening



LEFT ENDWALL SHEETING: FRAME LINE 1

NOTE:  
MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



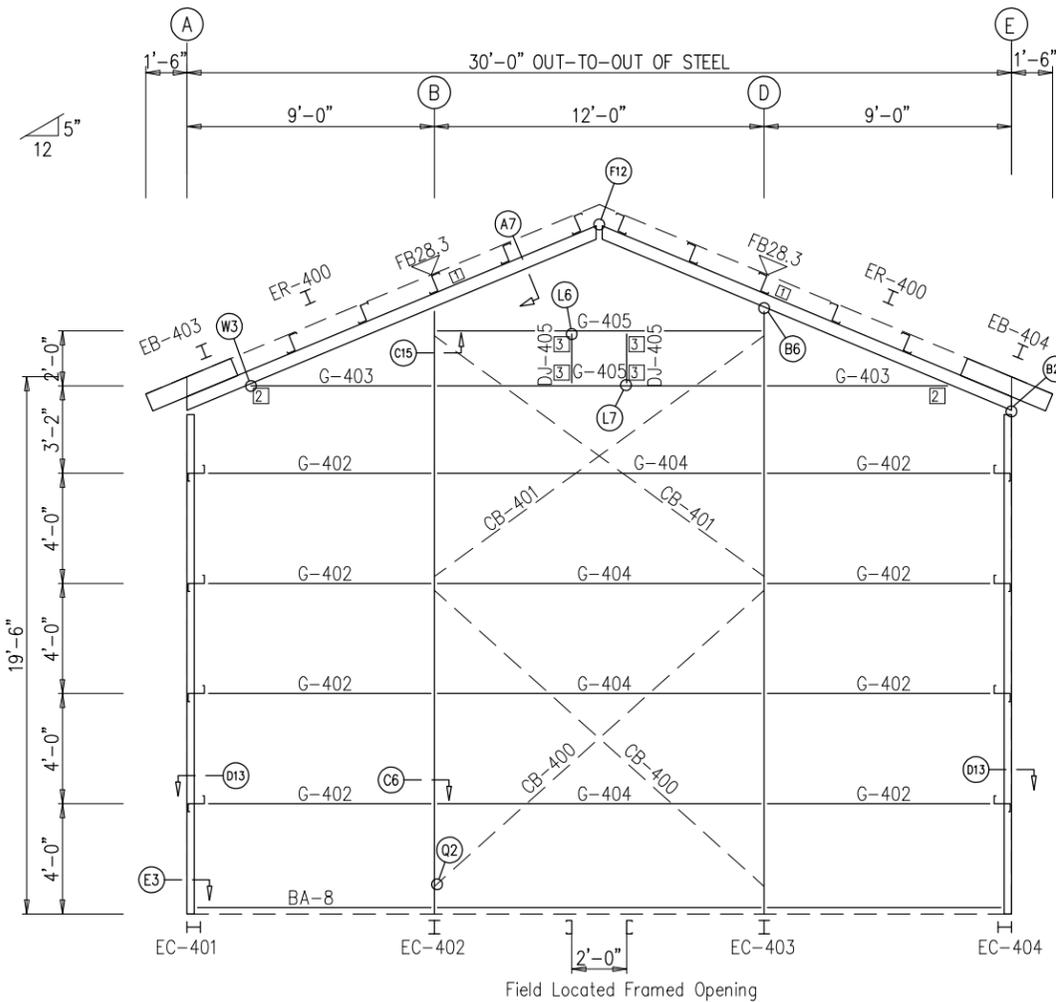
DESCRIPTION	ENDWALL FRAMING
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.:	56632
ENG. BY:	RA
DATE:	04/16/21
DWG. NO.:	9 OF 14
ISSUE:	P

BOLT TABLE FRAME LINE 3				
LOCATION	QUAN	TYPE	DIA	LENGTH
Cor_Column/Raf	4	A325	5/8"	1 1/2"
ER-400/ER-400	8	A325	5/8"	1 1/2"
Int_Column/Raf	4	A325	1/2"	1 1/4"
ER-400/EB-403	4	A325	5/8"	1 1/2"
ER-400/EB-404	4	A325	5/8"	1 1/2"

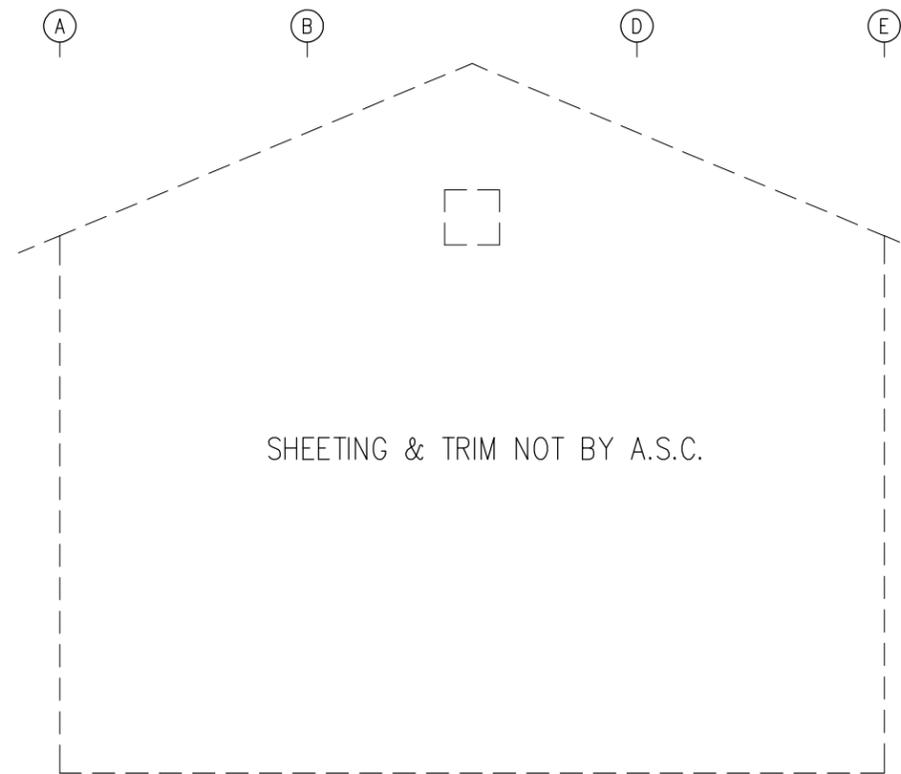
MEMBER TABLE FRAME LINE 3			
QUAN	MARK	PART	LENGTH
1	EB-403	W08531	3'-10 13/16"
1	EB-404	W08531	3'-10 13/16"
1	EC-401	W08531	19'-0 11/16"
1	EC-402	W08631	21'-7 11/16"
1	EC-403	W08631	21'-7 11/16"
1	EC-404	W08531	19'-0 11/16"
2	ER-400	W08531	15'-9 11/16"
2	DJ-405	8X25C16	1'-11"
8	G-402	8X25Z16	7'-11 1/2"
2	G-403	8X25C16	5'-8"
4	G-404	8X25Z16	11'-4"
2	G-405	8X25C16	11'-4"
2	CB-400	GS1716	16'-5"
2	CB-401	GS1716	15'-0"

FLANGE BRACE TABLE FRAME LINE 3			
VID	QUAN	MARK	LENGTH
1	2	FB28.3	2'-4 1/4"

CONNECTION PLATES FRAME LINE 3		
ID	QUAN	MARK/PART
1	0	BC-46
2	2	BC-15F
3	4	BC-01



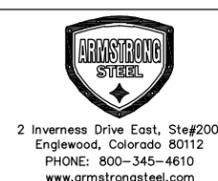
RIGHT ENDWALL FRAMING: FRAME LINE 3



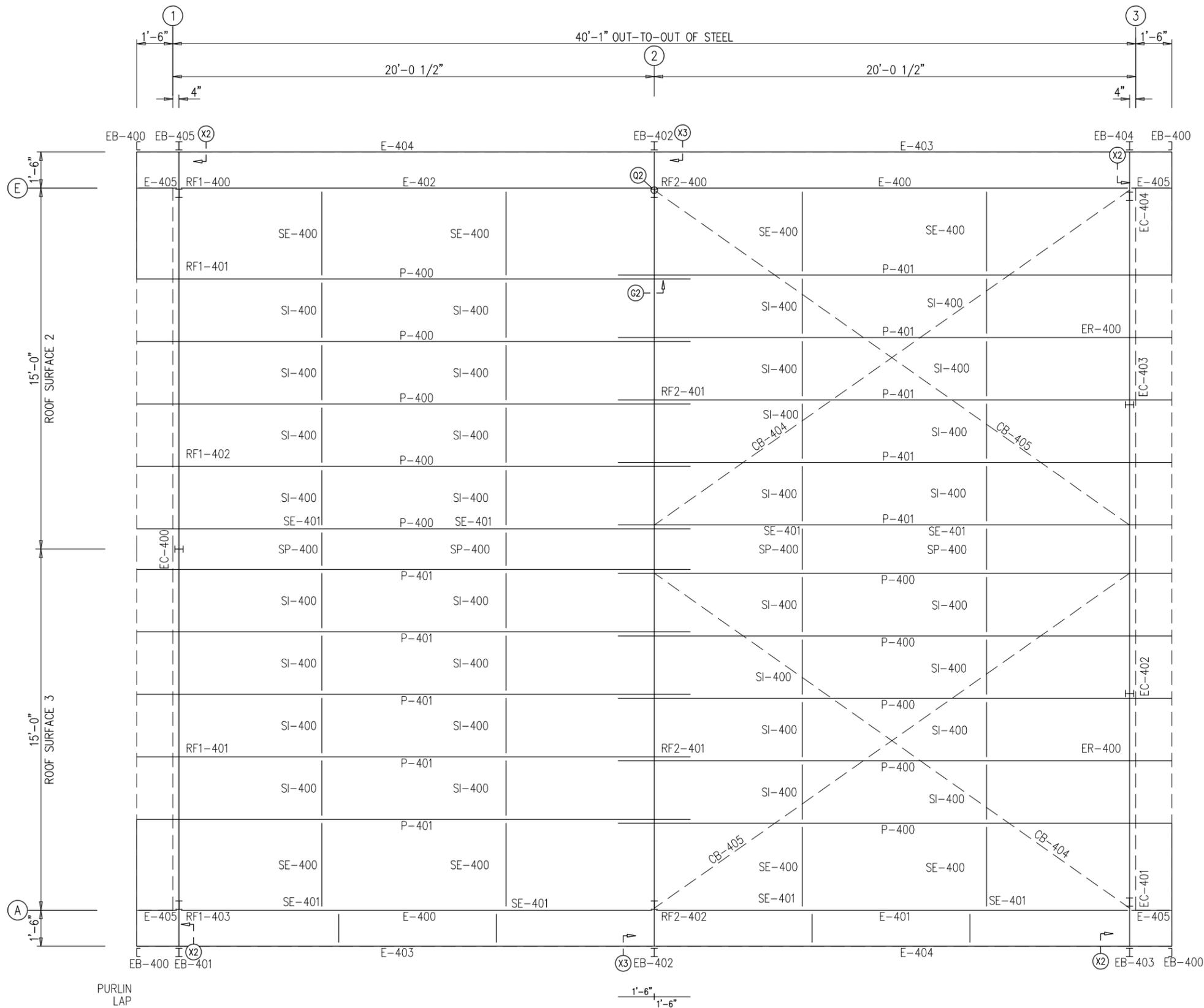
RIGHT ENDWALL SHEETING: FRAME LINE 3

NOTE:  
MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	ENDWALL FRAMING
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 10 OF 14 ISSUE: P



ROOF FRAMING PLAN

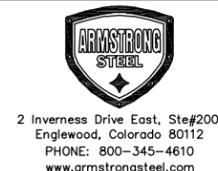
NOTE:  
 MINOR FIELD WORK OF STRUCTURAL, SECONDARY AND PANEL/TRIM ITEMS MAY BE NECESSARY TO ENSURE PROPER FIT. SUCH WORK IS CONSIDERED A NORMAL PART OF METAL BUILDING ERECTION. A.S.C. WILL NOT HONOR BACKCHARGES FOR MINOR FIELD WORK.

MEMBER TABLE			
ROOF PLAN			
QUAN	MARK	PART	LENGTH
4	EB-400	8X25U16	5'-10 3/8"
1	EB-401	W08531	2'-11 13/16"
2	EB-402	W08531	3'-4 3/16"
1	EB-403	W08531	3'-10 13/16"
1	EB-404	W08531	3'-10 13/16"
1	EB-405	W08531	2'-11 13/16"
10	P-400	8x25Z14	23'-0"
10	P-401	8x25Z14	23'-0"
2	E-400	08226DU5	19'-0 1/2"
1	E-401	08226DU5	19'-0 1/2"
1	E-402	08226DU5	19'-0 1/2"
2	E-403	08234DU5	21'-2"
2	E-404	08234DU5	21'-2"
4	E-405	08226DU5	1'-5 1/2"
2	CB-404	GS1716	24'-1 1/2"
2	CB-405	GS1716	24'-9 3/4"
4	SP-400	6X25Z16	1'-4 1/8"
32	SI-400	6X25Z16	2'-8 3/4"
8	SE-400	6X25Z16	3'-11 7/16"
8	SE-401	6X25Z16	1'-6 15/16"

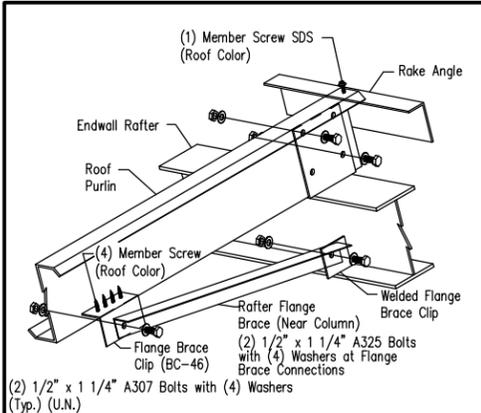
EXTENSION/CANOPY BOLTS				
ROOF PLAN				
MARK	QUAN	TYPE	DIA	LENGTH
EB-401	4	A325	3/4"	1 3/4"
EB-402	4	A325	3/4"	1 3/4"
EB-403	4	A325	3/4"	1 3/4"
EB-404	4	A325	3/4"	1 3/4"
EB-405	4	A325	3/4"	1 3/4"



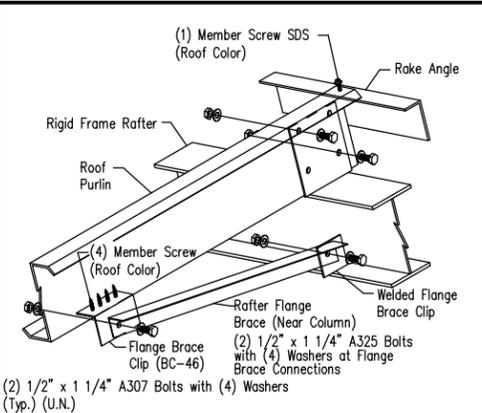
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



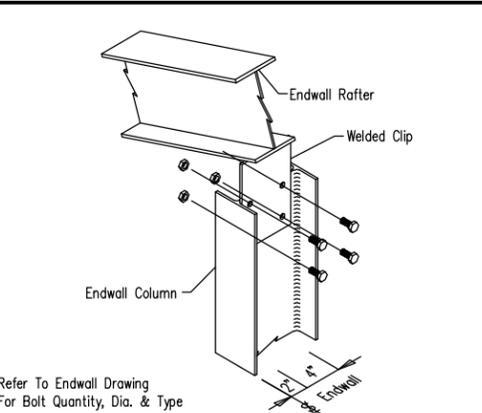
DESCRIPTION	ROOF FRAMING
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO:	56632
ENG. BY:	RA
DATE:	04/16/21
DWG. NO.:	11 OF 14
ISSUE:	P



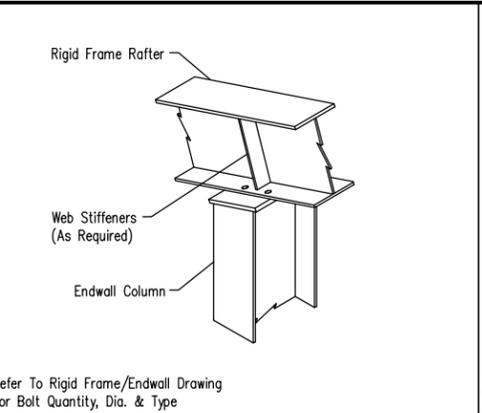
**A7** ROOF PURLIN TO HOT-ROLLED RAFTER W/ LINER PANEL OR LINER SYSTEM INSULATION



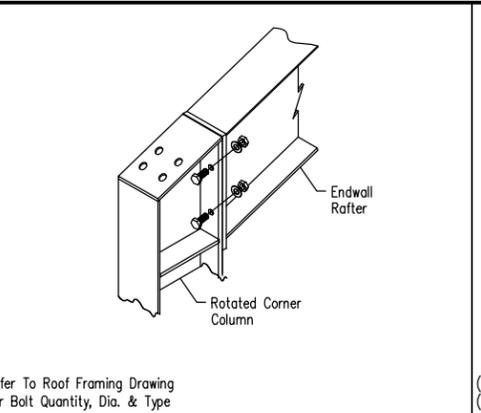
**A10** ROOF PURLIN TO RIGID FRAME RAFTER W/ LINER PANEL OR LINER SYSTEM INSULATION



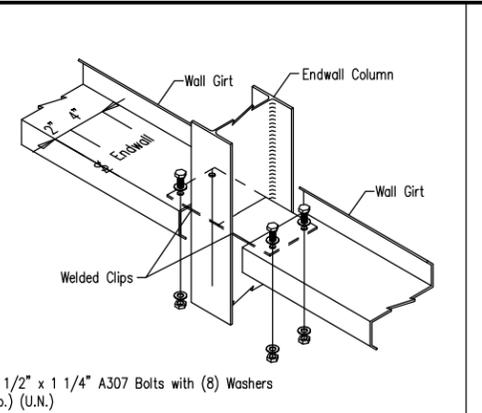
**B6** BUILT-UP ENDWALL COLUMN TO ENDWALL RAFTER



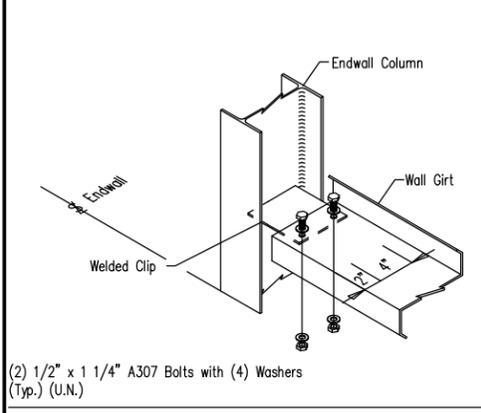
**B20** ENDWALL COLUMN TO RIGID FRAME RAFTER



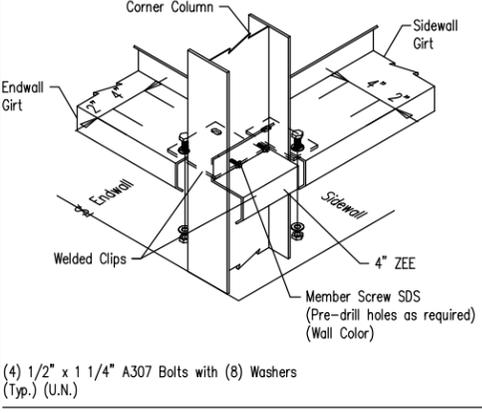
**B23** CORNER COLUMN TO ENDWALL RAFTER



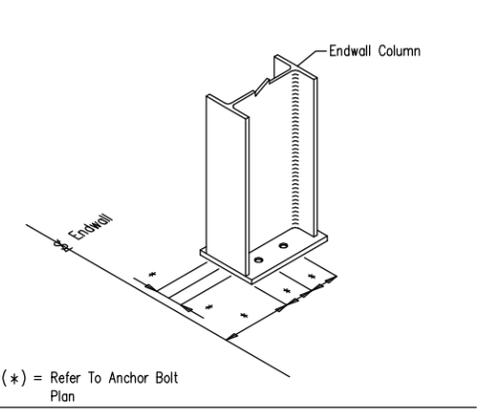
**C6** WALL GIRTS TO ENDWALL COLUMN



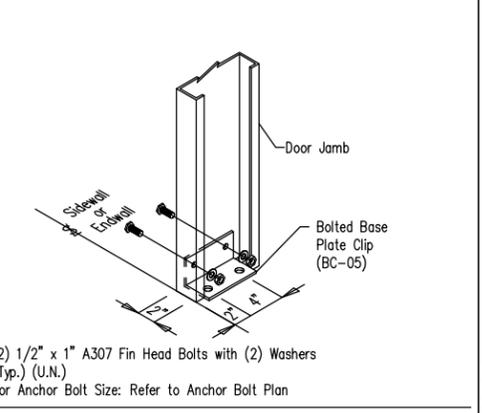
**C15** WALL GIRTS TO ENDWALL COLUMN



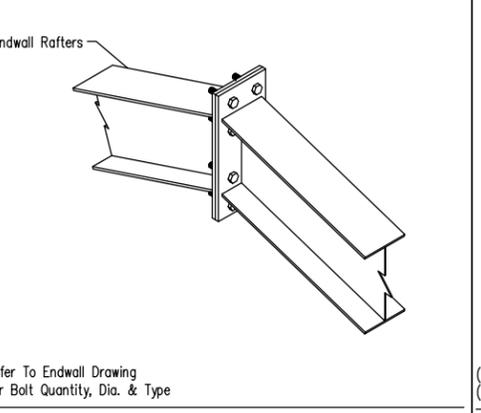
**D13** WALL GIRTS TO ENDWALL CORNER COLUMN



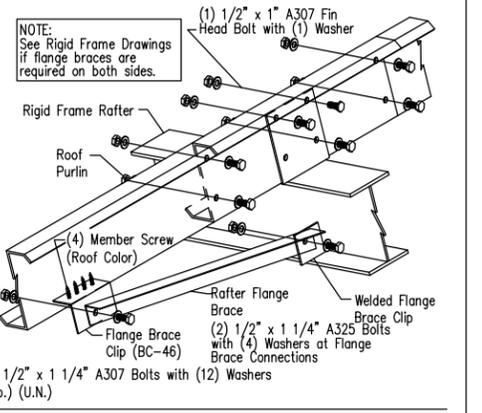
**E3** ANCHOR BOLTS AT ENDWALL COLUMNS



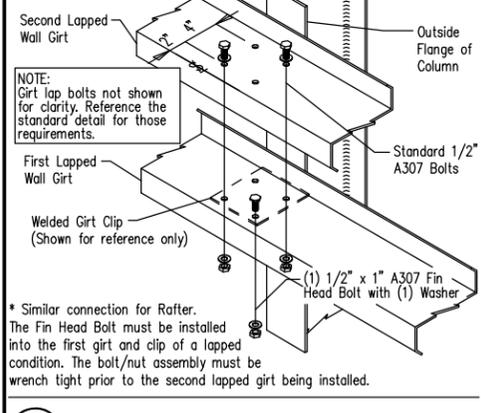
**E6** BASE PLATE FOR DOOR JAMB



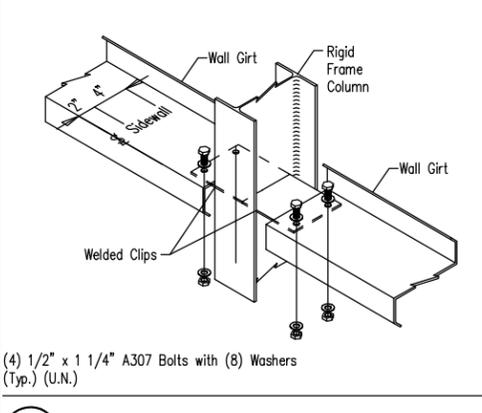
**F12** RAFTER SPLICE ALONG SURFACE



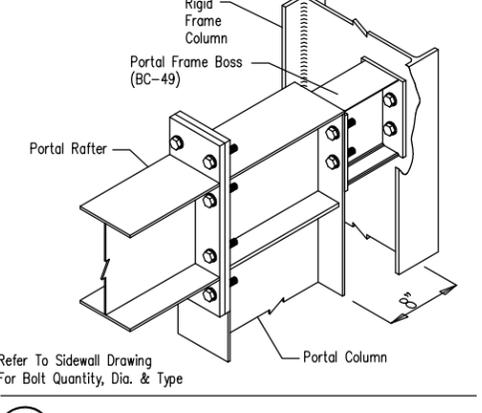
**G2** ROOF PURLIN TO INTERIOR RIGID FRAME W/ LINER PANEL OR LINER SYSTEM INSULATION



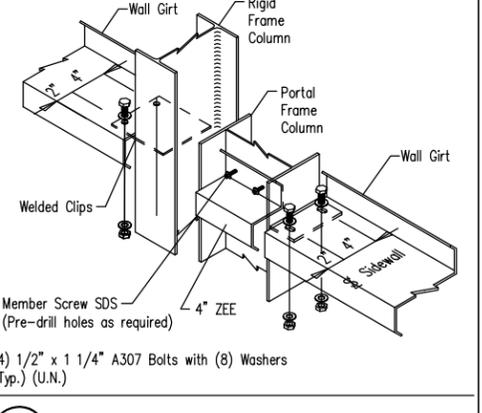
**H0** BYPASS LAPPED WALL GIRTS



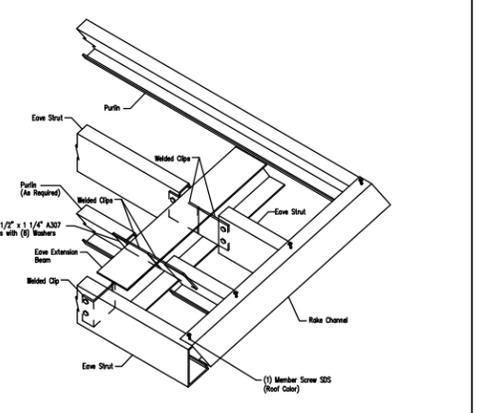
**H6** WALL GIRTS TO RIGID FRAME COLUMN



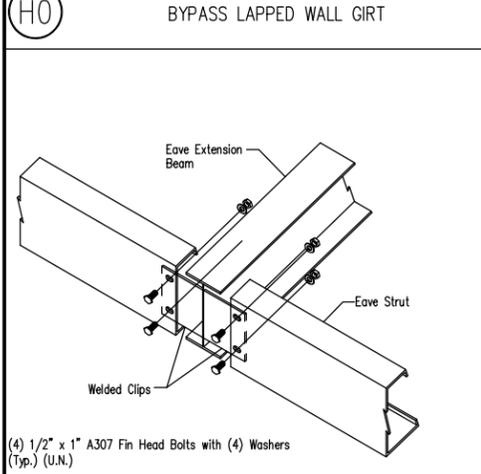
**H10** PORTAL FRAME TO RIGID FRAME COLUMN



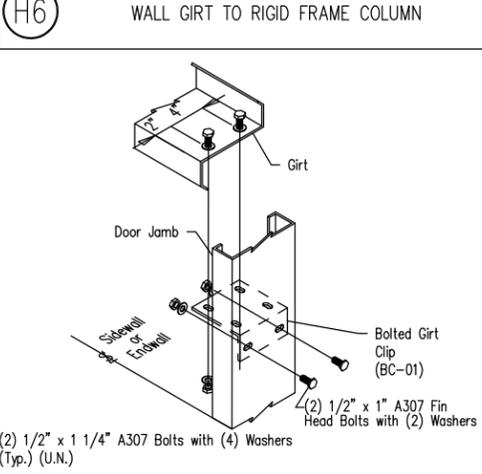
**H20** GIRTS WITH PORTAL FRAME



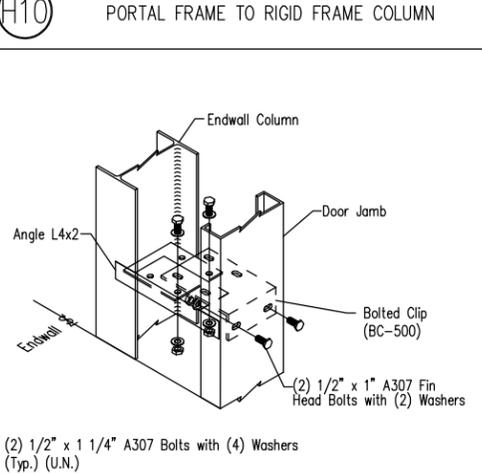
**I21** EAVE STRUT AND RAKE CHANNEL EXTENSION DETAIL



**J32** EAVE STRUT TO EAVE EXTENSION



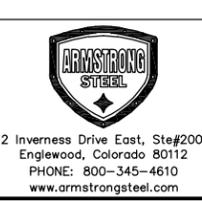
**K2** WALL GIRTS TO DOOR JAMB



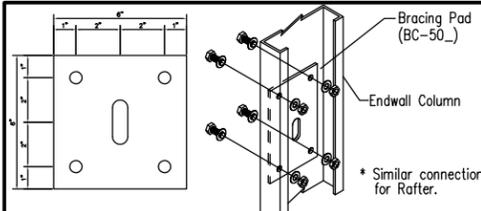
**K5** ENDWALL COLUMN AND DOOR JAMB CONNECTION



ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	DETAIL DRAWINGS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO:	56632
ENG. BY:	RA
DATE:	04/16/21
DWG. NO.:	12 OF 14
ISSUE:	P



**DIAGONAL BRACE PAD INSTALLATION INSTRUCTIONS**

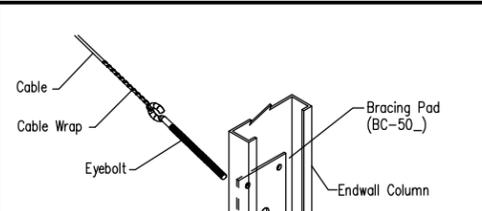
**STEP 1** Line up brace pad with pre existing hole punches in the member.

**STEP 2** Bolt the brace pad down using (4) 1/2" A307 bolts.

**STEP 3** Field cut out the slot, using the brace pad slot as a template.

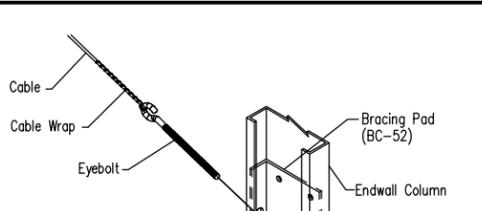
**STEP 4** Install cable brace as normal, still leaving the brace pad installed along with the 1/2" A307 bolts.

**Q2** DIAGONAL BRACE PAD TO WEB OF CEE COLUMN



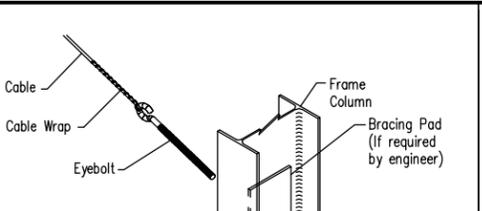
\* Similar connection for Rafter. Insert Eyebolt through slot in web. Then assemble Hillside Washer, Flat Washer, and Nut.

DIAGONAL CABLE BRACE TO WEB OF CEE COLUMN



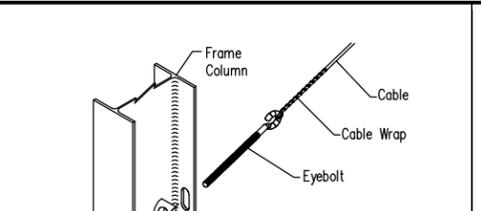
\* Similar connection for Rafter. Insert Eyebolt through slot in flange. Then assemble Hillside Washer, Flat Washer, and Nut.

DIAGONAL CABLE BRACE TO FLANGE OF CEE COLUMN



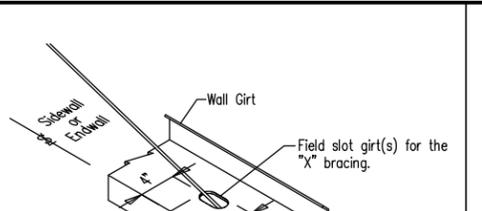
\* Similar connection for Rafter. Insert Eyebolt through slot in web. Then assemble Hillside Washer, Flat Washer, and Nut.

DIAGONAL CABLE BRACE TO WEB OF FRAME COLUMN



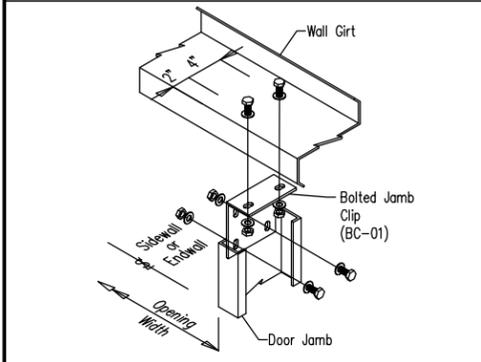
Insert Eyebolt through slot in flange. Then assemble Hillside Washer, Flat Washer, and Nut.

DIAGONAL CABLE BRACE TO FLANGE OF FRAME COLUMN



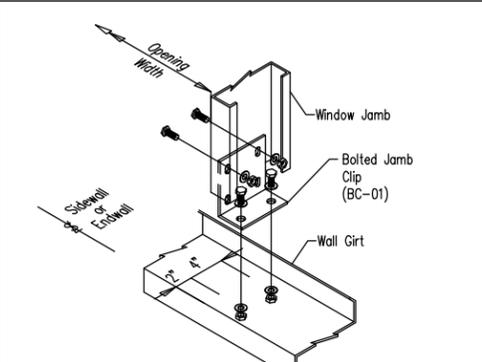
Field slot girt(s) for the "X" bracing.

DIAGONAL CABLE BRACE AT FLUSH WALL GIRTS



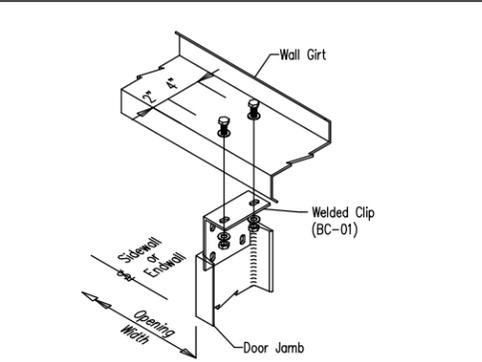
(4) 1/2" x 1 1/4" A307 Bolts with (8) Washers (Typ.) (U.N.)

**L6** DOOR JAMB TO WALL GIRTS



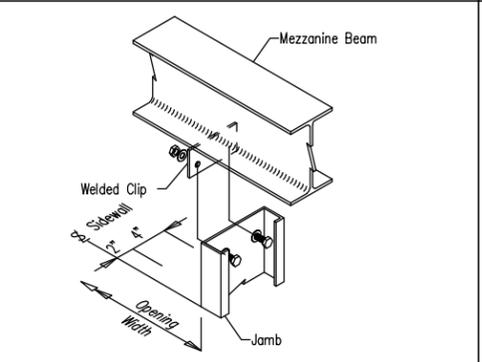
(4) 1/2" x 1 1/4" A307 Bolts with (8) Washers (Typ.) (U.N.)

**L7** WINDOW JAMB TO WALL GIRTS



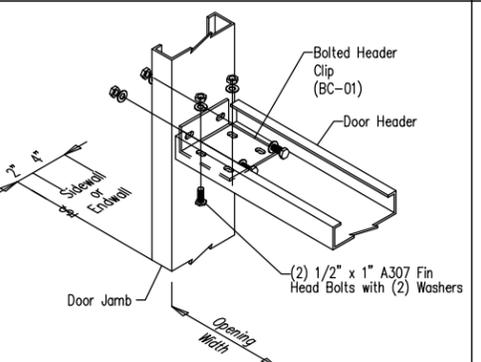
(2) 1/2" x 1 1/4" A307 Bolts with (4) Washers (Typ.) (U.N.)

**L8** HOT-ROLLED CEE DOOR JAMB TO WALL GIRTS



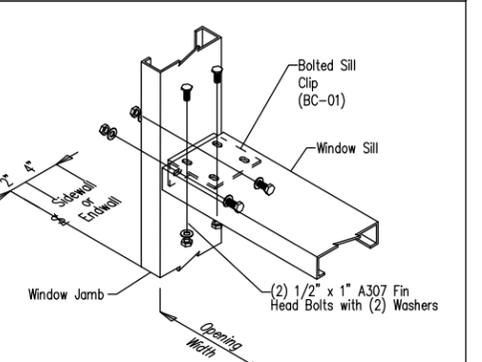
(2) 1/2" x 1 1/4" A307 Bolts with (4) Washers (Typ.) (U.N.)

**L71** JAMB TO MEZZANINE BEAM



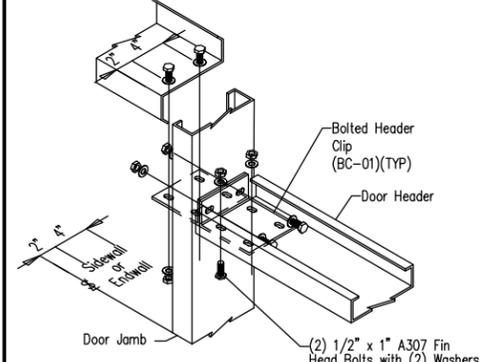
(2) 1/2" x 1 1/4" A307 Bolts with (4) Washers (Typ.) (U.N.)

**M1** HEADER TO JAMB



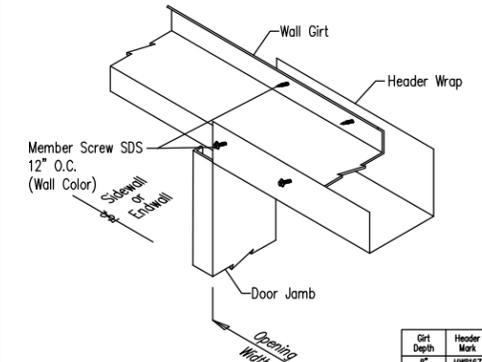
(2) 1/2" x 1 1/4" A307 Bolts with (4) Washers (Typ.) (U.N.)

**M2** SILL TO JAMB



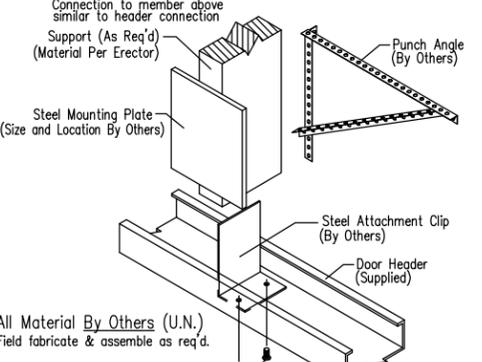
(4) 1/2" x 1 1/4" A307 Bolts with (8) Washers (Typ.) (U.N.)

**M3** DOOR HEADER & GIRTS TO DOOR JAMB



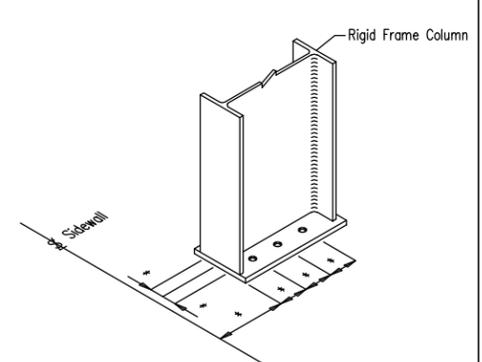
Member Screw SDS 12" O.C. (Wall Color)

**M15** HEADER WRAP TO WALL GIRTS



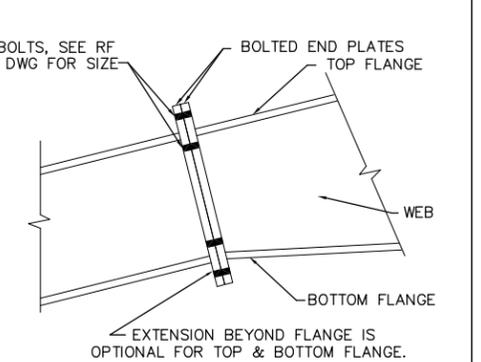
All Material By Others (U.N.) Field fabricate & assemble as req'd.

**OH** O. H. DOOR TORSION BAR BEARING SUPPORT



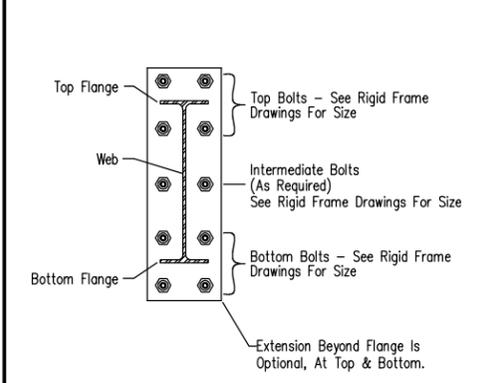
(\* ) = Refer To Anchor Bolt Plan

**R3** ANCHOR BOLTS AT SIDEWALL COLUMNS

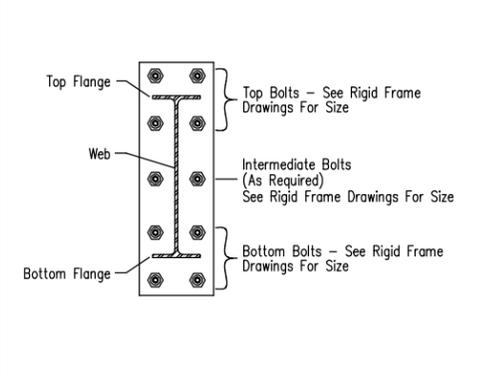


BOLTS, SEE RF DWG FOR SIZE

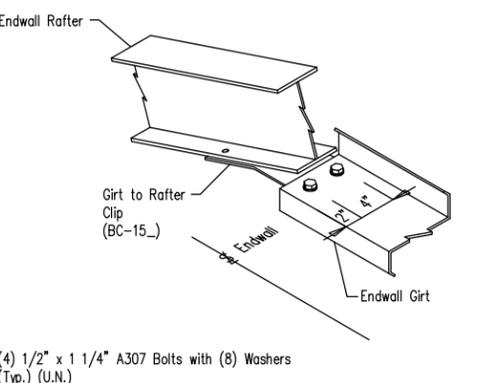
**U1** BOLTED END PLATE RAFTER SPLICE



**U2** BOLTS FOR RIGID FRAME RAFTER AT BUILDING PEAK



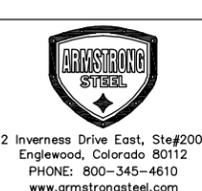
**U3** BOLTS FOR RIGID FRAME RAFTER TO COLUMN CONNECTION



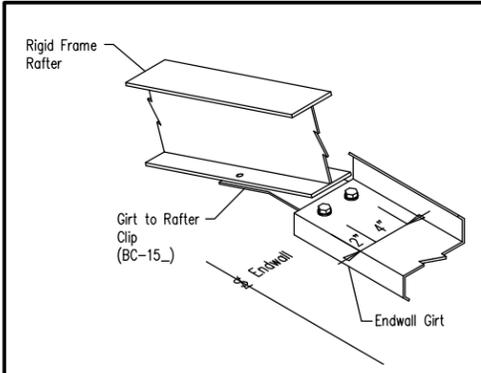
**W3** ENDWALL GIRTS TO HOT-ROLLED RAFTER



ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA

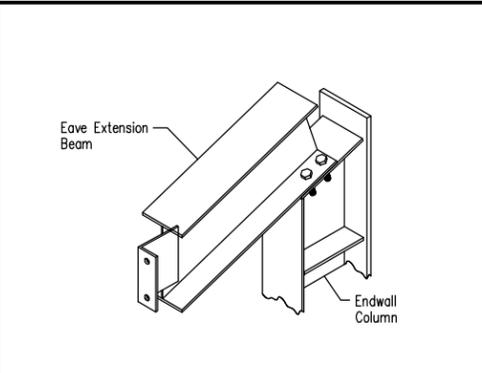


DESCRIPTION	DETAIL DRAWINGS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 13 OF 14 ISSUE: P



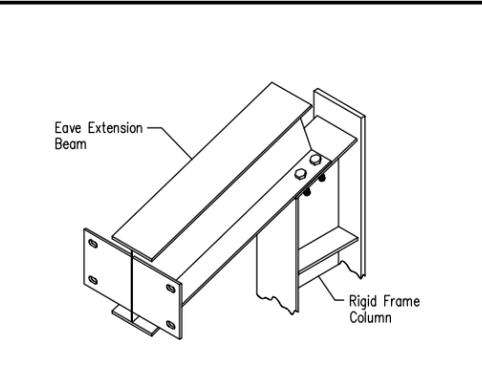
(4) 1/2" x 1 1/4" A307 Bolts with (8) Washers (Typ.) (U.N.)

**W4** ENDWALL GIRT TO RIGID FRAME RAFTER



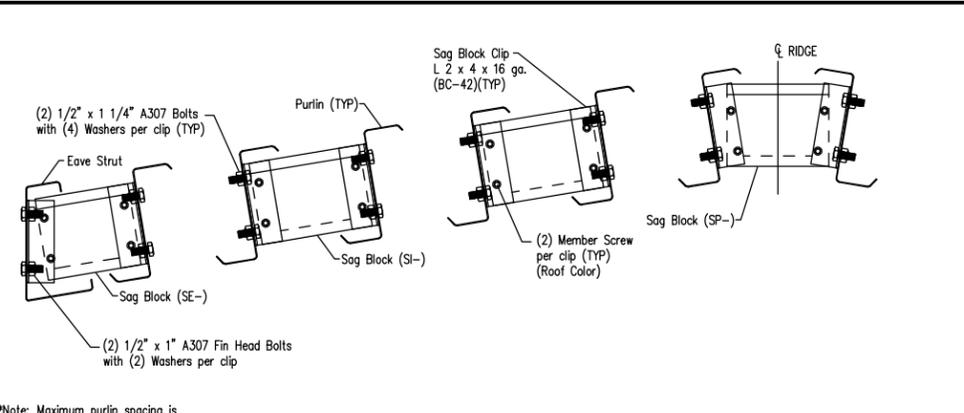
Refer To Roof Framing Drawing For Bolt Quantity, Dia. & Type

**X2** EXTENSION BEAM TO ENDWALL COLUMN



Refer To Roof Framing Drawing For Bolt Quantity, Dia. & Type

**X3** EXTENSION BEAM TO RIGID FRAME



\*Note: Maximum purlin spacing is at 5'-0 O.C.

TYPICAL SAG BLOCK AT GABLED ROOF < 2:12 DRAWING NO. SCREW\_18



ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
P	PERMIT	04.21.21	KK	SW	RA



DESCRIPTION	DETAIL DRAWINGS
CUSTOMER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
END USER	JAMY WHITEMAN/FORTIFIED SOLUTIONS
SCALE	NOT TO SCALE
JOB NO.: 56632	ENG. BY: RA DATE: 04/16/21
	DWG. NO.: 14 OF 14 ISSUE: P