

**GENERAL NOTES**

- 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".
- MATERIALS**

ASTM DESIGNATION	MIN. YIELD STRENGTH
Hot Rolled Steel Shapes (W, S & C) L	A572 Fy = 50 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 = 50 KSI
Cold Formed Light Gage	A653/A1011 Fy = 50, 55 KSI
Roof and Wall Shears	A792/A653 Fy = 50, 80 KSI
Cable Brace	A475 - TYPE 1 Fy = 36 KSI
Roof Brace	A36 Fy = 36 KSI
Machine Bolts & Nuts	A307 Fu = 80 KSI
High Strength Bolts (1"0 and less)	A325-TYPE 1 Fu = 120 KSI
High Strength Bolts (>1"0 to 1 1/2"0)	A325-TYPE 1 Fu = 105 KSI
Anchor Bolts (if supplied)	A36/A307/F1554 Fu = 80 KSI

Red Oxide
- 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. 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 job site storage. A.S.C. shall not be responsible for any field applied paint and/or coatings. (Section 6.5 AISC Code of Standard Practice, 9th Edition). Nominal thickness of primer will be 1 mil unless otherwise specified in contract documents.
- GALVANIZED OR SPECIAL COATINGS**

See Contract Documents
- ALL BOLTS ARE 1/2"0 x 0-1 1/4" A307 EXCEPT:**

  - Eave strut connection - 1/2"0 x 0-1 1/4" A307
  - Endwall rafter splice - 5/8"0 x 0-1 3/4" A325-N
  - Endwall column to rafter connection - 1/2"0 x 0-1 1/4" A325-N
  - Main frame connections - SEE CROSS SECTION

NOTE: Washers are not supplied unless noted otherwise on drawing
- A325 BOLT TIGHTENING REQUIREMENTS**

All high strength bolts are A325-N unless specifically noted otherwise. Structural bolts shall be tightened by the turn-of-the-nut method in accordance with the 9th Edition AISC "Specification For Structural Steel Buildings" 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 both threads not excluded from the shear plane.
- CLOSURE STRIPS ARE FURNISHED FOR APPLICATION:**

INSIDE: Under roof panels at eave & base  
OUTSIDE: Between endwall panels and rake trim  
- Under continuous ridge vent skirts
- ERECTOR NOTE:**

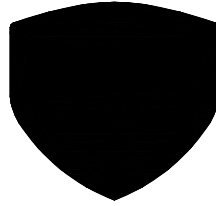
All bracing, strapping, & bridging shown and provided by A.S.C. for this building is required and shall be installed by the erector as a permanent part of the structure. If additional bracing is required for stability during erection, it shall be the erector's responsibility to determine the amount of such bracing and to procure and install as needed.
- ERECTOR AND UNLOADING NOT BY A.S.C.**
- 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.
- CORRECTIONS OF ERRORS AND REPAIRS (M/MMA 6.10)**

Claims for correction of alleged mistakes will be disallowed unless A.S.C. shall have received prior notice thereof and allowed reasonable inspection of such mistakes. The correction of minor mistakes 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 mistakes without the prior approval of A.S.C.

**BUYER/END USE CUSTOMER RESPONSIBILITIES**

- 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 A.S.C. in fabrication upon receiving such.
- 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, practices, 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.
- 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, 9th Edition)
- Approval of A.S.C. drawings and calculations indicates that A.S.C. has correctly interpreted and applied the Contract Documents. The 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)
- Once the BUYER/END USE CUSTOMER has signed A.S.C. Approval Package and the project is released for fabrication, charges shall be billed to the BUYER/END USE CUSTOMER including materials, engineering and other costs. An additional fee may be charged if the project must be moved from the fabrication and shipping schedule.



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**DRAWING PACKAGE**

JOB NO. : 53168  
CUSTOMER : DEALER  
END USER : PROJECT  
END USE :  
LOCATION :  
:  
:  
:  
COUNTY :  
PH. NO. : EMAIL:

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

**DESIGN LOADS:**

Design Code / Wind Code : **IBC 09 / IBC 09**  
Enclosure : **Closed**  
Dead Load (psf) : **2.000**  
Collateral Load (psf) : **1**  
Wind Load  
Basic Wind Speed, 3 sec gust : **120**  
Wind Importance Factor, Iw : **1.00**  
Wind Exposure : **C**  
Internal Pressure Coefficient, GCp1 : **0.18 / -0.18**  
Wall Panel Design Wind Pressure  
Live Load  
Primary Framing (psf) : **20.00**  
Trib. Area Reduction : **No**  
Secondary Framing (psf) : **20.00**  
Snow Load  
Ground Snow Load, Pg (psf) : **5.00**  
Roof Snow Load, P1 (psf) : **3.5**  
Sloped Roof Snow Load, Ps (psf) : **3.5**  
Snow Exposure Factor, Ce : **1.00**  
Snow Importance Factor, Is : **1.00**  
Thermal Factor, Ct : **1.00**  
Sloped Factor, Cs : **1.00**  
Seismic Load  
Seismic Importance Factor, Ie : **1.00**  
Seismic Use Group : **II - Normal**  
Site Class : **D**  
Mapped Spectral Response Acceleration : **Ss = 0.10 :S1 = 0.06**  
Spectral Response Coefficients : **Sds = 0.11 :Sd1 = 0.09**  
Seismic Design Category : **B**  
Basic Force Resisting Systems Used : **Steel System Not Specifically Detailed For Resistance**

Rigid Frames : **3.00**  
SW X-Bracing : **3.00**  
SW Wind Bent : **3.00**  
Longitudinal : **0.88**  
Transverse : **0.39**

Response Modification Factors, R : **Rigid Frames = 3.00 Omega = 3.0000**  
**SW X-Bracing = 3.00 Omega = 3.0000**  
**SW Wind Bent = 3.00 Omega = 3.0000**

Seismic Response Coefficient, Cs : **Rigid Frames = 0.0363**  
**SW X-Bracing = 0.0363**  
**SW Wind Bent = 0.0363**

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

**BUILDING DESCRIPTION:**

Width (ft) : **30**  
Length (ft) : **50**  
Eave Ht. at BSW (ft) : **16**  
Eave Ht. at FSW (ft) : **16**  
Roof Slope at BSW : **1.0:12**  
Roof Slope at FSW : **1.0:12**  
Bay Spacing (ft) : **1 at 16.42**

**COVERING AND TRIMS:**

Roof Panels & Trims  
Panel Type : **26 Ga. PR**  
Panel Color : **Galvalume +**  
Trim Colors  
Eave Trim : **NEED SIG 200**  
Eave Gutter :  
Gable Trim : **NEED SIG 200**

Wall Panel & Trims  
Panel Type : **26 Ga. PR**  
Panel Color : **NEED SIG 200**  
Trim Colors  
Corner Trims : **NEED SIG 200**  
Opening Trims : **NEED SIG 200**  
Downspouts :  
Base Trim : **NEED SIG 200**  
Special Requirements : **NONE**

Insulation  
Roof Insulation : **NONE**  
Wall Insulation : **NONE**

NOTES:  
BUILDING HAS NOT BEEN DESIGNED FOR OVERHEAD OR ROLLUP DOOR FRAMED OPENINGS. ONLY SELF FRAMING DOORS NOT REQUIRING GIRTS CUT MAY BE USED.

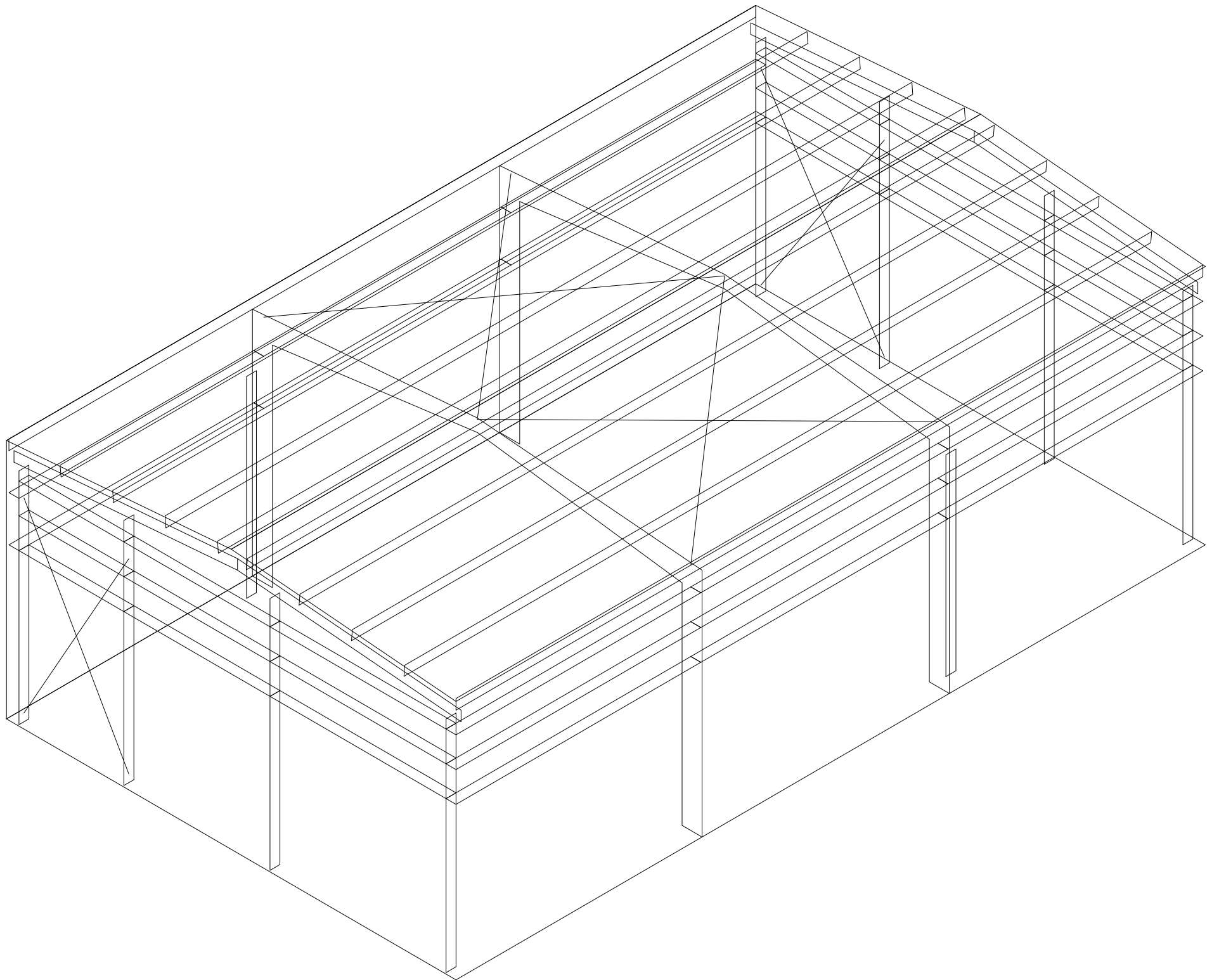
- The BUYER/END USE CUSTOMER is responsible for overall project coordination. All interface, compatibility, and design considerations concerning any materials not furnished by A.S.C. and A.S.C. steel system are to be considered and coordinated by the BUYER/END USE CUSTOMER. Specific design criteria concerning this interface between materials must be furnished before release for fabrication or A.S.C. assumptions will govern (Section 4 and Commentary, AISC Code of Standard Practice, 9th Edition)
- 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.
- 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 gyps, 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. (Section 7 AISC Code of Standard Practice, 9th Edition.)
- 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 embeddings. 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. (Section A10 1996 MBMA Low Rise Building Systems Manual)
- Normal erection operations include the corrections of minor mistakes 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. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 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. (Section 7 AISC Code of Standard Practice, 9th Edition)
- 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.
- 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.
- Roof drainage systems (gutter, downspouts, etc.) must be free of any obstruction to ensure smooth operation at any given time.
- 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.

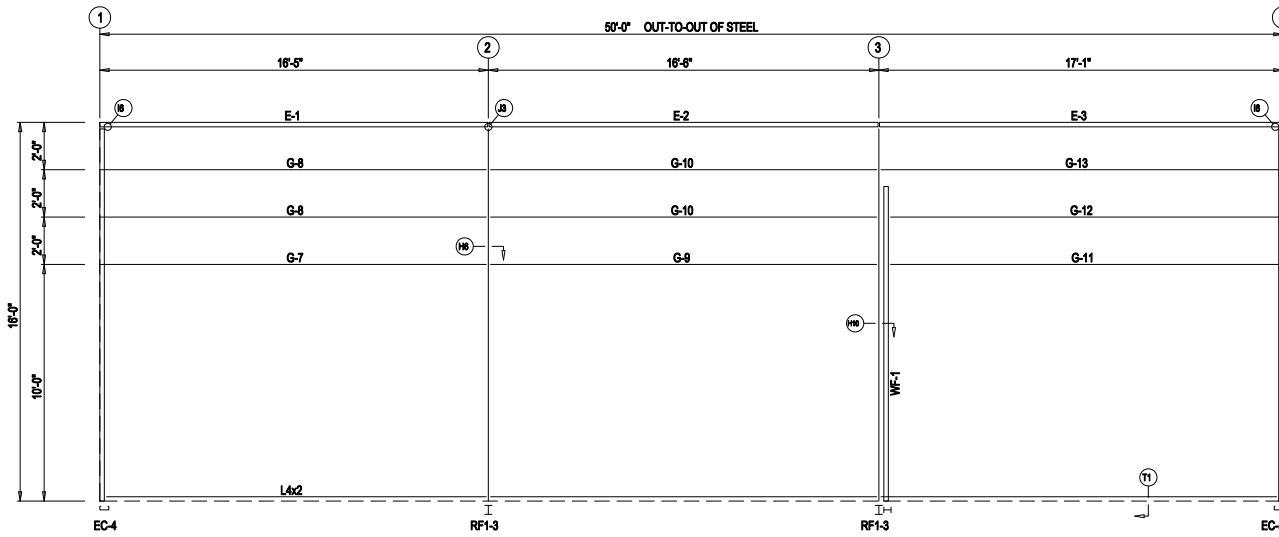
ROOF SNOW LOAD (IN PSF)	EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD START (IN INCHES)
20	16.00	8.30
25	17.25	8.62
30	17.90	8.95
35	18.55	9.28
40	19.20	9.60
45	19.85	9.92
50	20.50	10.25
55	21.15	10.58
60	21.80	10.90
65	22.45	11.22
70	23.10	11.55
75	23.75	11.88
80	24.40	12.20

NOTE:  
See Snow Removal Procedure. Refer to Metal Building System Manual 2002 Edition, Section A8.4, Page X1-A8-2.

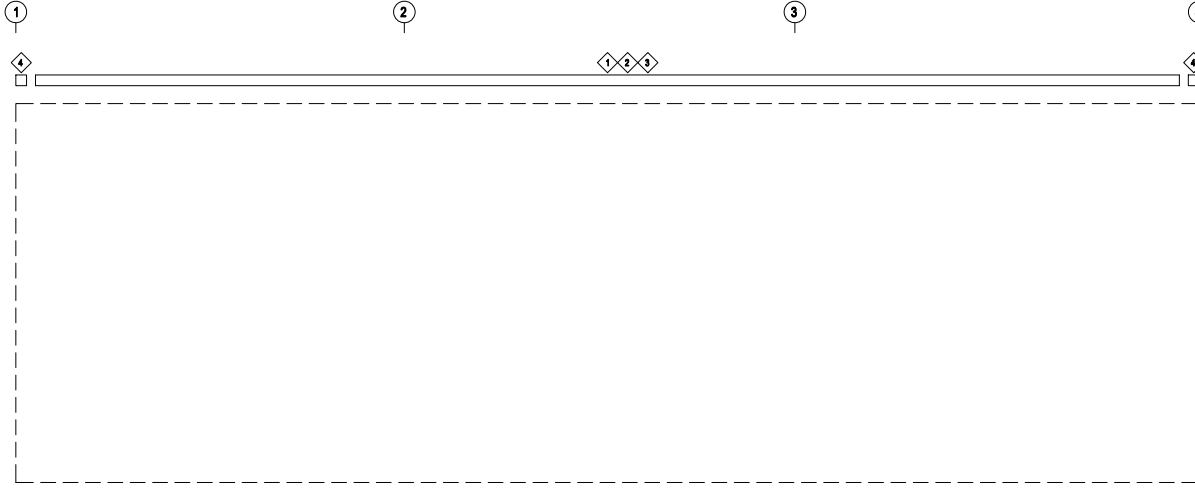
SEALING OF THIS DRAWING DOES NOT IMPLY OR CONSTITUTE THAT ARMSTRONG STEEL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT. ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY A.S.C. IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL AND MECHANICAL SYSTEMS, AND/OR OTHER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

JOB NO -53168 DEALER





SIDEWALL FRAMING: FRAME LINE F



SIDEWALL SHEETING & TRIM: FRAME LINE F

BOLT TABLE				
FRAME LINE F				
LOCATION	QUAN	TYPE	DIA	LENGTH
WF-1 - RF1-3	48	A325	5/8"	1 1/2"

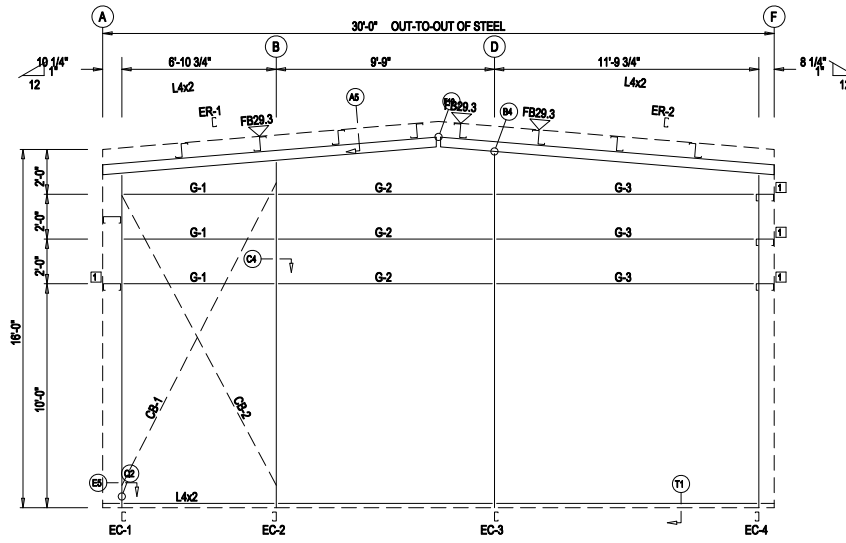
TRIM TABLE			
FRAME LINE F			
ID	PART	LENGTH	DETAIL
1	FL-19	10'-2"	
2	FL-19A	20'-2"	
3	FL-93	20'-2"	
4	FL-773	6"	TRIM_141

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	MM/DD	DRAF	CHKR	DES

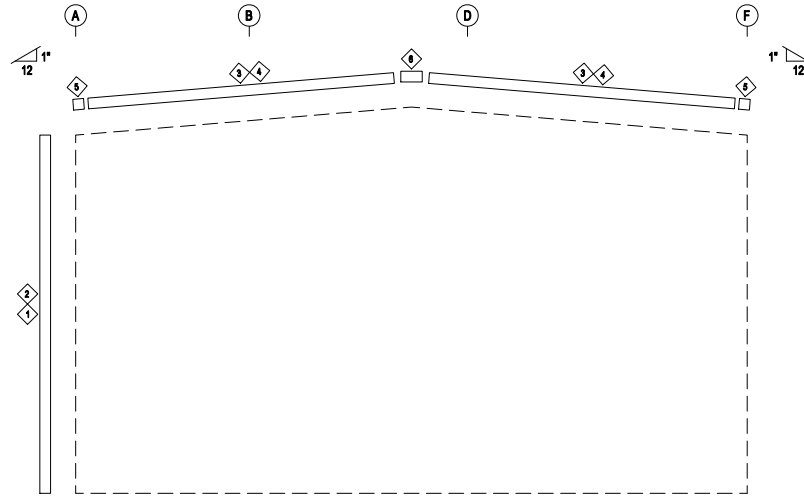


DESCRIPTION	SIDEWALL FRAMING & SHEETING			
CUSTOMER	DEALER			
END USER	PROJECT			
END USE				
LOCATION				
DES BY: DES	DATE: 2/20/13	ENG BY: DES	DATE: 2/20/13	
JOB NO: 53168	SCALE: N.T.S.	DWG NO: OF	ISSUE: A	





ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

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

TRIM TABLE			
FRAME LINE 1			
ID	PART	LENGTH	DETAIL
1	FL-22	7'-3"	
2	FL-23	10'-0"	
3	XFL-16	15'-3"	
4	FL-79	20'-2"	TRIM 199
5	FL-16A	6"	TRIM 150
6	FL-16B	1'-4"	TRIM 106

FLANGE BRACE TABLE		
FRAME LINE 1		
ID	MARK	LENGTH
1	FB29.3	2'-5 1/4"

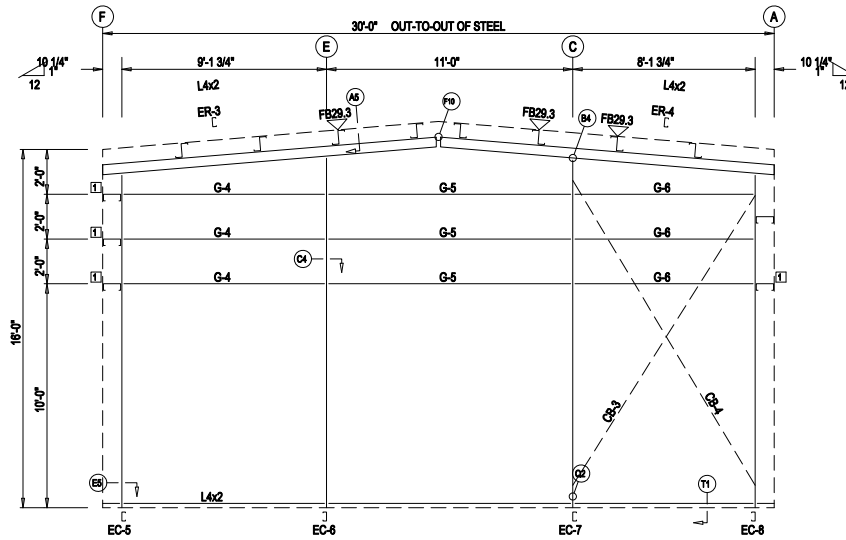
CONNECTION PLATES	
FRAME LINE 1	
ID	MARK/PART
1	SC-5

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	01/01/13	DRAF	CHKR	DES

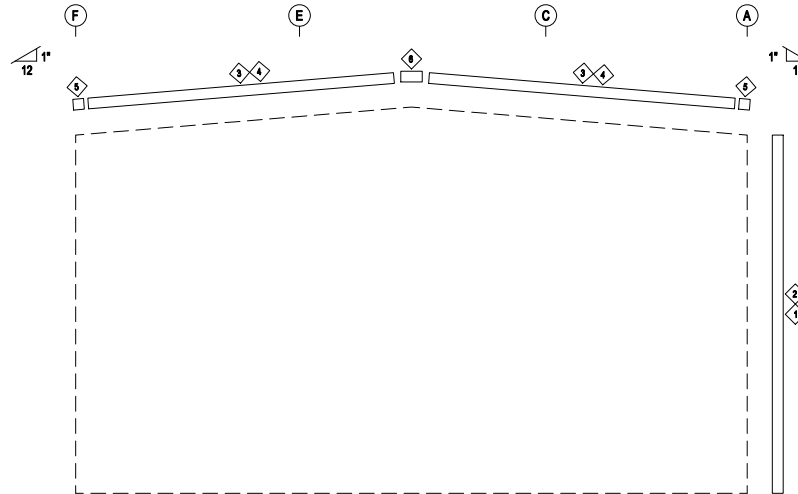


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DESCRIPTION	ENDWALL FRAMING & SHEETING						
CUSTOMER	DEALER						
END USER	PROJECT						
END USE							
LOCATION							
DES BY:	DES	DATE:	2/20/13	ENG BY:	DES	DATE:	2/20/13
JOB NO.:	53168	SCALE:	N.T.S.	DWG NO.:	OF	ISSUE:	A



ENDWALL FRAMING: FRAME LINE 4



ENDWALL SHEETING & TRIM: FRAME LINE 4

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

TRIM TABLE		
FRAME LINE 4		
ID	PART	LENGTH
1	FL-22	7'-3"
2	FL-23	10'-0"
3	XFL-16	15'-3"
4	FL-79	20'-2"
5	FL-16A	6"
6	FL-16B	1'-4"

FLANGE BRACE TABLE		
FRAME LINE 4		
ID	MARK	LENGTH
1	FB29.3	2'-5 1/4"

CONNECTION PLATES	
FRAME LINE 4	
ID	MARK/PART
1	SC-5

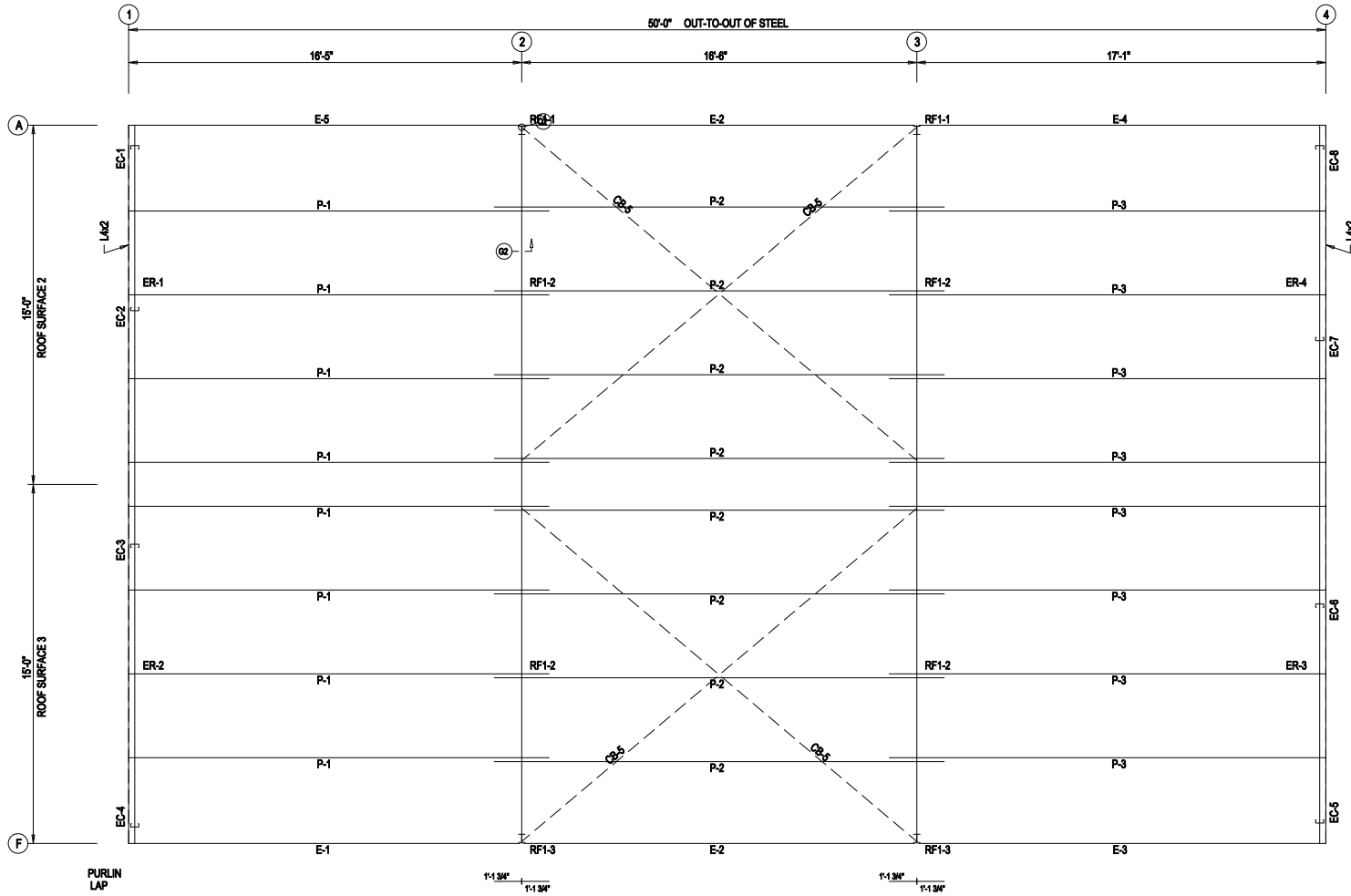
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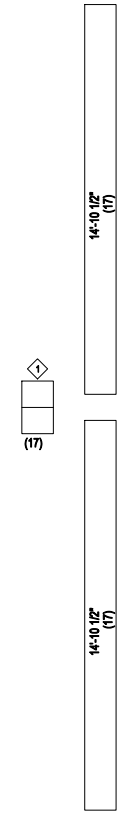
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DESCRIPTION		ENDWALL FRAMING & SHEETING			
CUSTOMER	DEALER				
END USER	PROJECT				
END USE					
LOCATION					
DES. BY:	DATE:	ENG. BY:	DATE:		
DES	2/20/13	DES	2/20/13		
JOB NO:	53168	SCALE:	N.T.S.	DWG. NO.:	OF
				ISSUE:	A

TRIM TABLE			
ROOF PLAN			
ID	PART	LENGTH	DETAIL
1	FL-51	3'-0"	TRIM_80



ROOF FRAMING PLAN



ROOF SHEETING  
 PANELS: 26 Ga. PR  
 Galvalume +

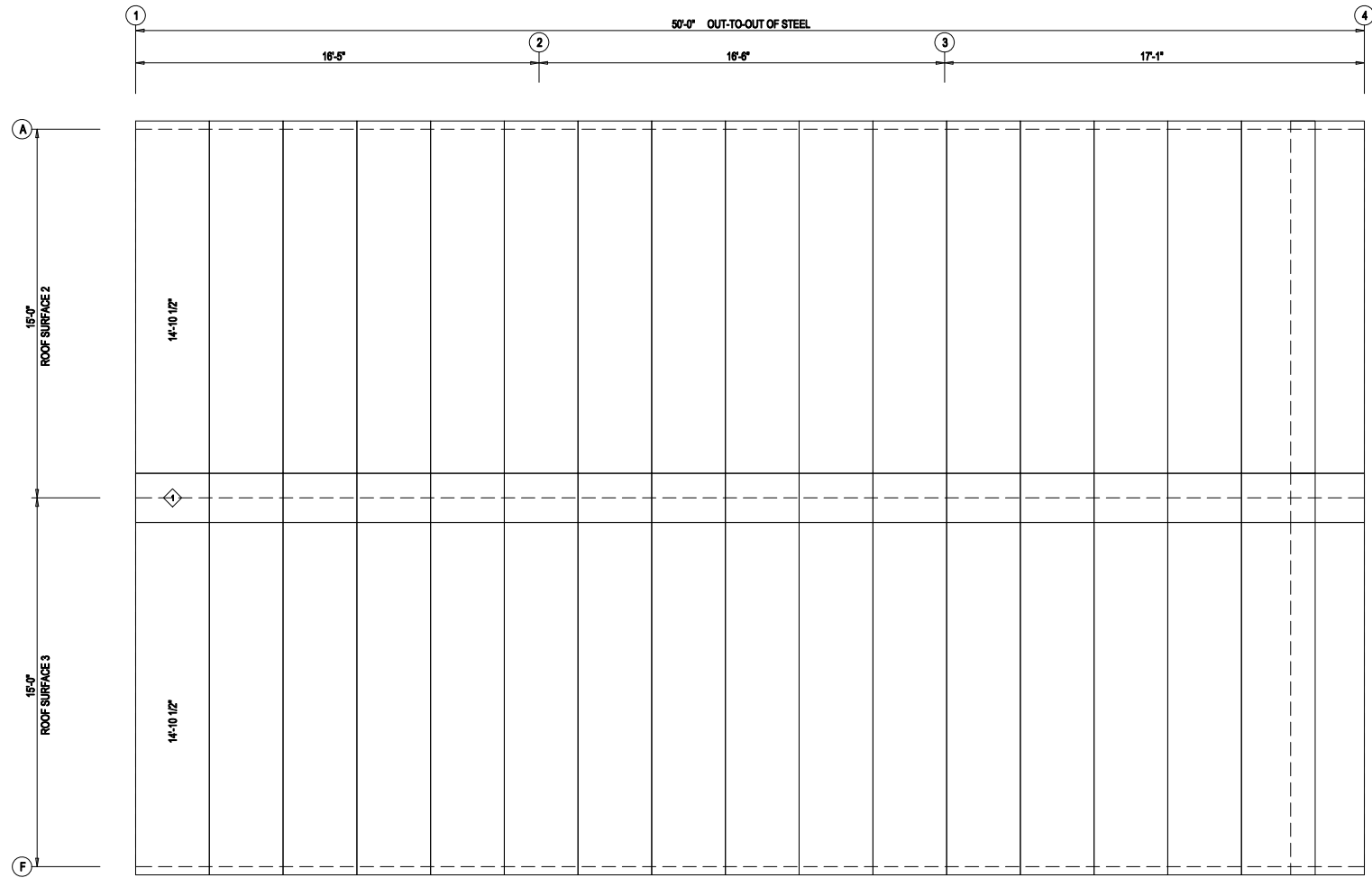
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A	APPROVAL/PERMIT	01/10/13	DRAF	CHKR	DES



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DESCRIPTION			
ROOF FRAMING & SHEETING			
CUSTOMER	DEALER		
END USER	PROJECT		
END USE			
LOCATION			
DES BY:	DES	DATE: 2/20/13	ENG BY: DES
JOB NO:	53168	SCALE: N.T.S.	DWG NO: OF
			DATE: 2/20/13
			ISSUE: A

TRIM TABLE			
ROOF PLAN			
ID	PART	LENGTH	DETAIL
1	FL-81	3'-0"	TRIM 80



**ROOF SHEETING PLAN**  
 PANELS: 26 Ga. PR - Galvalume +

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	01/01/13	DRAF	CHKR	DES

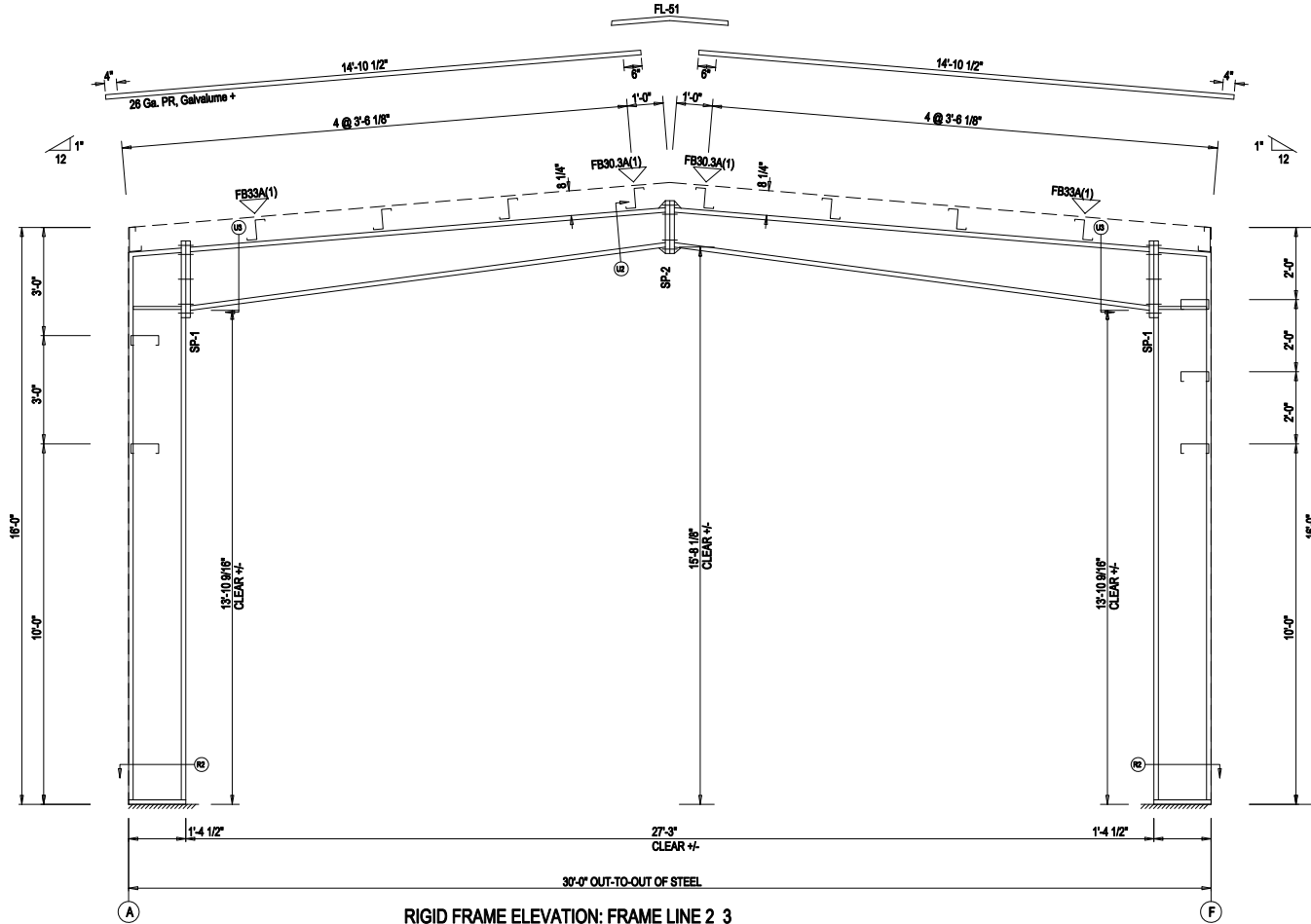


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DESCRIPTION	ROOF FRAMING & SHEETING						
CUSTOMER	DEALER						
END USER	PROJECT						
END USE							
LOCATION							
DES BY:	DES	DATE:	2/20/13	END BY:	DES	DATE:	2/20/13
JOB NO.:	53168	SCALE:	N.T.S.	DWG. NO.:	OF	ISSUE:	A

SPLICE BOLT TABLE						
Mark	Qty Top	Qty Bot	Int	Type	Dia	Length
SP-1	4	4	2	A325	0.825	1.75
SP-2	4	4	0	A325	0.825	1.75

▽ FLANGE BRACES: Both Sides(U.N.)  
 FBxxA(1); xx=length(in)  
 A - L2x2x14G



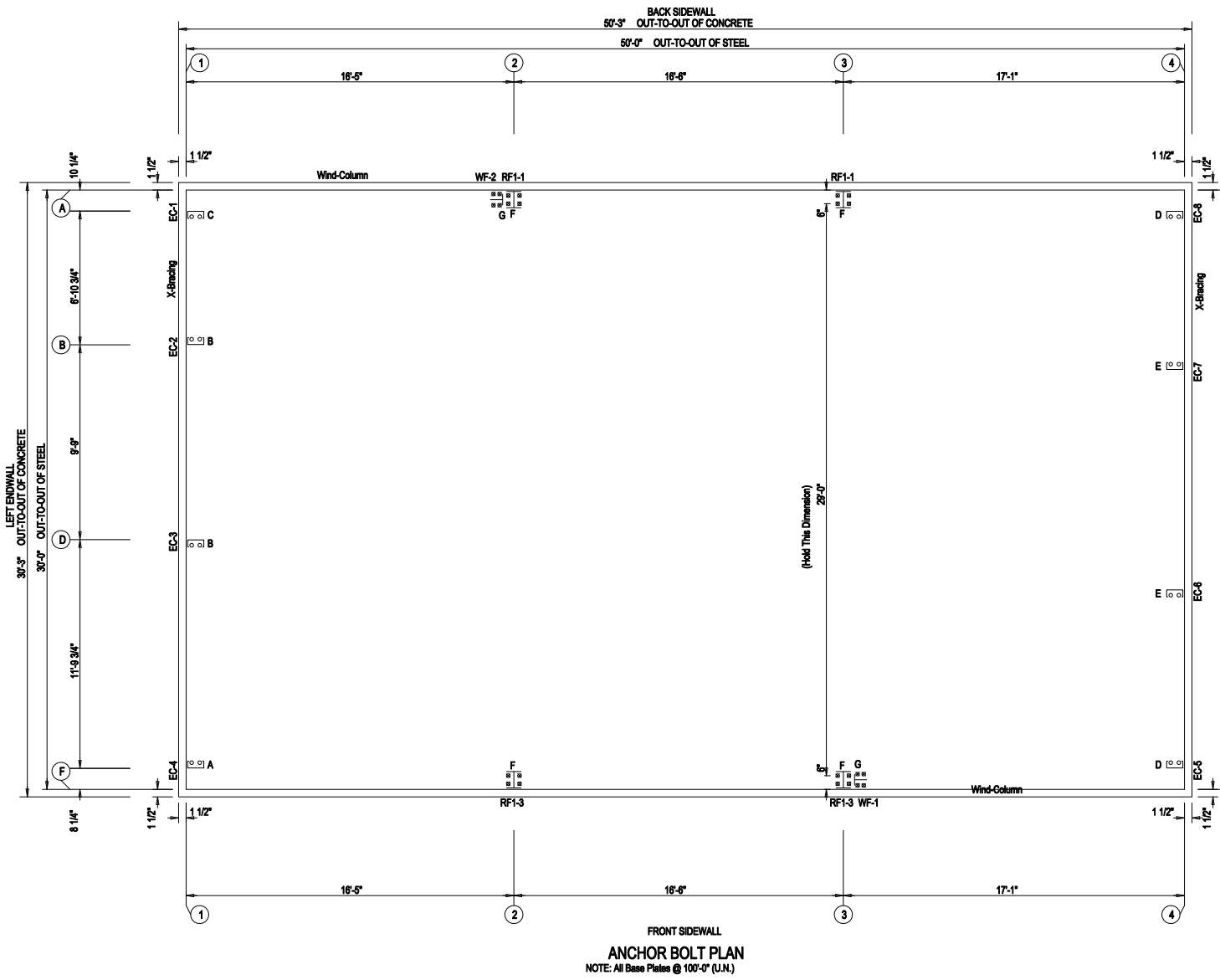
RIGID FRAME ELEVATION: FRAME LINE 2 3

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
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DESCRIPTION	RIGID FRAME ELEVATION				
CUSTOMER	DEALER				
END USER	PROJECT				
END USE					
LOCATION					
DES. BY:	DES	DATE:	2/20/13	ENG. BY:	DES
JOB NO.:	53168	SCALE:	N.T.S.	DWG. NO.:	OF
				DATE:	2/20/13
				ISSUE:	A



**ANCHOR BOLT SUMMARY**

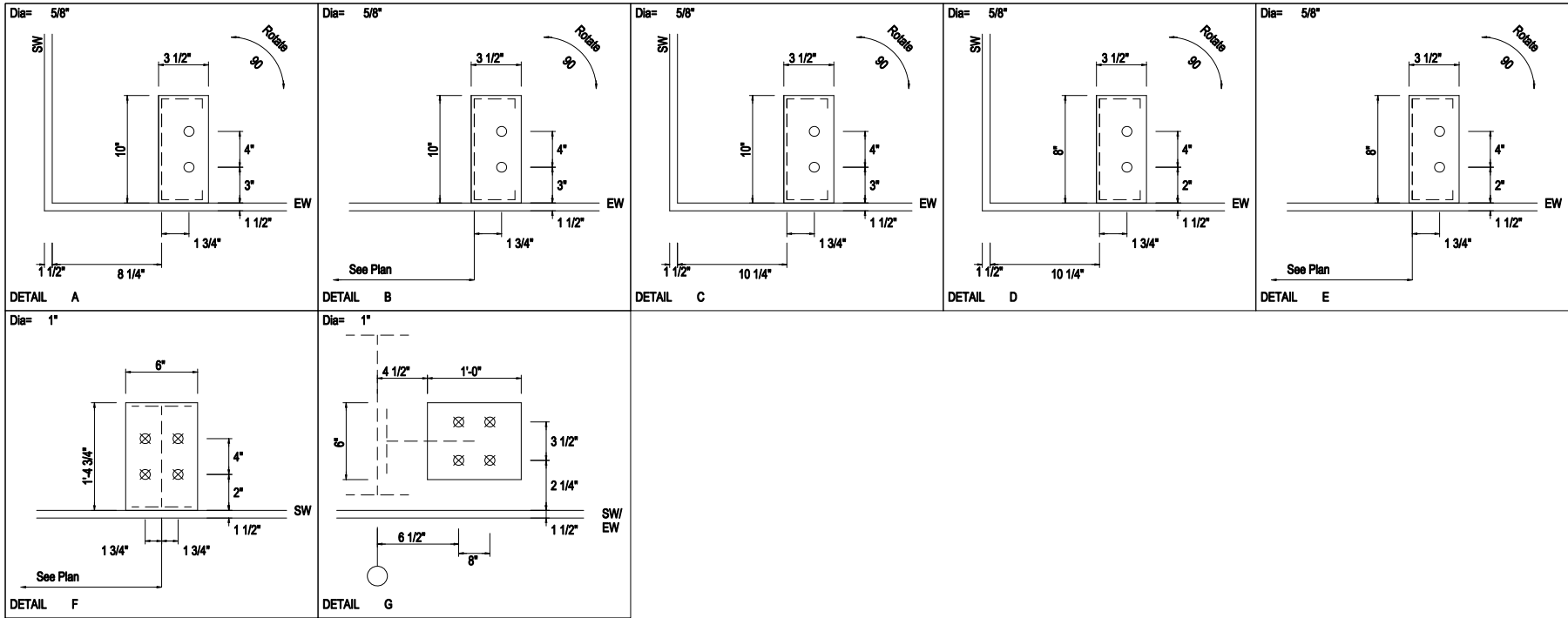
Qty	Locate	Dia (in)	Type
16	Endwall	5/8"	A307
16	Frame	1"	A307
8	WindCol	1"	A307

**ANCHOR BOLT PLAN**  
NOTE: All Base Plates @ 100'-0" (U.N.)

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	01/01/13	DRAF	CHKR	DES



DESCRIPTION	ANCHOR BOLT PLAN & REACTIONS						
CUSTOMER	DEALER						
END USER	PROJECT						
END USE							
LOCATION							
DES BY:	DES	DATE:	2/20/13	END BY:	DES	DATE:	2/20/13
JOB NO.:	53168	SCALE:	N.T.S.	DWG. NO.:	OF	ISSUE:	A

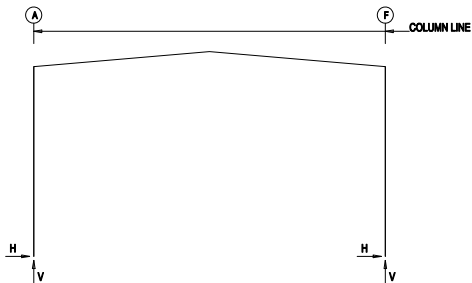


ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	01/01/13	DRAF	CHKR	DES



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DESCRIPTION		ANCHOR BOLT DETAILS & REACTIONS	
CUSTOMER	DEALER		
END USER	PROJECT		
END USE			
LOCATION			
DES. BY:	DES	DATE:	2/20/13
		ENG. BY:	DES
		DATE:	2/20/13
JOB NO.:	53168	SCALE:	N.T.S.
		DWG. NO.:	OF
		ISSUE:	A



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

Fm Line	Col Line	Column Reactions (k)			Hmin H	V Vmin	Anc Bolt Qty	Dia	Base Plate (in)			Grout (in)	
		Load ID	Hmax H	V Vmax					Load ID	Width	Length		Thick
2*	A	3	2.5	2.8	4	-3.8	-3.7	4	1.000	6.000	18.75	0.625	0.0
		9	-0.1	39.5	6	0.5	-48.7						
		8	5	3.8	-3.7	2	-2.5	2.8	4	1.000	6.000	18.75	0.625
2*	F	5	3.8	-3.7	2	-2.5	2.8	4	1.000	6.000	18.75	0.625	0.0
		8	40.3	7	-0.5	-48.5							
2*	Frame lines:		2	3									

NOTES FOR REACTIONS

- Building reactions are based on the following building data:
- Width (ft) = 30.0
  - Length (ft) = 50.0
  - Eave Height (ft) = 18.0/ 16.0
  - Roof Slope (rise/run) = 1.0/ 12.0
  - Dead Load (psf) = 2.0
  - Collateral Load (psf) = 1.0
  - Live Load (psf) = 20.0
  - Snow Load (psf) = 3.5
  - Wind Speed (mph) = 120.0
  - Wind Code = IBC 09
  - Exposure = C
  - Closed/Open = C
  - Importance Seismic = 1.00
  - Seismic Design Category = B
  - Seismic Coeff (Fa/Sa) = 0.16

ID	Description
1	Dead+Collateral+Live
2	Dead+Collateral+0.75Live+0.75Wind_Left1
3	Dead+Collateral+0.75Live+0.75Wind_Right1
4	0.8Dead+Wind_Left2
5	0.8Dead+Wind_Right2
6	0.8Dead+Wind_Long1+LWIND1_L2E
7	0.8Dead+Wind_Long1+LWIND1_R2E
8	0.8Dead+Wind_Long2+LWIND2_L2E
9	0.8Dead+Wind_Long2+LWIND2_R2E
10	0.8Dead+Wind_Left2+Wind_Suction
11	0.8Dead+Wind_Right2+Wind_Suction
12	0.8Dead+Wind_Right2+Wind_Suction
13	Dead+Collateral+0.75Live+0.75Wind_Left2+0.75Wind_Suction

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type
16	Endwall	5/8"	A307
16	Frame	1"	A307
8	WindCol	1"	A307

BUILDING BRACING REACTIONS

Loc	Wall Line	Col Line	Reactions (k)				Panel Shear (lb/ft)
			Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	
L_EW	1	A,B	1.5	3.3	0.1	0.2	
F_SW	F	Wind Column In Wall					
R_EW	4	C,A	1.5	2.9	0.1	0.2	
B_SW	A	Wind Column In Wall					

WIND COLUMN REACTIONS

Loc	Wall Line	Col Line	R/L	Load ID	Reactions			Anc Bolt Qty	Dia	Base Plate (in)		
					Horz (k)	Vert (k)	Moment (k-ft)			Width	Length	Thick
F_SW	F	3	R	Wind	2.8	43.3	37.9	4	1.000	6.000	12.000	0.825
B_SW	A	2	R	Seismic	0.4	6.8	5.9	4	1.000	6.000	12.000	0.825
B_SW	A	2	R	Wind	2.8	42.5	37.2					
B_SW	A	2	R	Seismic	0.4	6.8	5.9					

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead		Collateral		Live		Snow		Wind_Left		Wind_Right	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2*	A	0.2	1.0	0.1	0.3	1.5	5.0	0.3	0.9	-3.4	-6.7	1.4	-3.0
2*	F	-0.2	1.0	-0.1	0.3	-1.5	5.0	-0.3	0.9	-1.4	-3.0	3.4	-6.7
Frame Line	Column Line	Wind_Left2		Wind_Right2		Wind_Long1		Wind_Long2		Seismic_Left		Seismic_Right	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2*	A	-3.9	-4.2	0.9	-0.5	0.4	-48.4	-0.1	-48.0	-0.1	-0.1	0.1	0.1
2*	F	-0.9	-0.5	3.9	-4.2	-0.4	-48.2	0.1	-48.8	-0.1	0.1	0.1	-0.1
Frame Line	Column Line	Seismic_Long		MIN_SNOW		LWIND1_L2E		LWIND1_R2E		LWIND2_L2E		LWIND2_R2E	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2*	A	0.0	-8.8	0.4	1.3	0.0	-0.9	-0.1	-0.1	0.0	-0.9	-0.1	-0.1
2*	F	0.0	-8.8	-0.4	1.3	0.1	-0.1	0.0	-0.9	0.1	-0.1	0.0	-0.9

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Fm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1		Wind_Right1		Wind_Left2	Wind_Right2	Wind Press Horz		
						Horz	Vert	Horz	Vert					
1	A	0.1	0.0	0.6	0.1	1.5	-4.1	0.0	2.8	1.5	-4.1	0.0	2.8	-0.7
1	B	0.2	0.1	1.4	0.2	0.0	1.0	1.5	-4.4	0.0	1.0	1.5	-4.4	-1.5
1	D	0.3	0.1	2.1	0.4	0.9	-2.9	0.9	-3.0	0.9	-2.9	0.9	-3.0	-2.0
1	F	0.2	0.0	0.9	0.2	0.0	-0.9	0.0	-1.3	0.0	-0.9	0.0	-1.3	-1.2
Fm Line	Col Line	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seis_Left Horz	Seis_Right Horz	MIN_SNOW		LWIND1_L		LWIND1_R			
							Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
1	A	0.8	-0.7	-0.4	0.1	-0.2	0.0	0.2	0.0	0.1	0.0	-0.2	0.0	-0.1
1	B	1.6	-1.6	-1.0	0.0	0.2	0.1	-0.2	0.0	0.4	0.0	-0.3	0.0	0.1
1	D	2.2	-2.5	-1.5	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	-0.2
1	F	1.3	-1.1	-0.6	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	-0.4
Fm Line	Col Line	LWIND2_L		LWIND2_R		LWIND2_L		LWIND2_R						
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert					
1	A	0.0	-0.2	0.0	-0.1									
1	B	0.0	-0.3	0.0	0.1									
1	D	0.0	0.0	0.0	-0.2									
1	F	0.0	0.0	0.0	-0.4									
Fm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1		Wind_Right1		Wind_Left2	Wind_Right2	Wind Press Horz		
						Horz	Vert	Horz	Vert					
4	F	0.1	0.0	0.7	0.1	0.0	-1.1	0.0	-0.7	0.0	-0.7	-0.9		
4	E	0.3	0.1	2.0	0.3	0.0	-2.8	0.0	-1.7	0.0	-1.7	-1.8		
4	C	0.3	0.1	1.8	0.3	1.5	-4.6	0.0	0.2	1.5	-4.6	0.0	0.2	
4	A	0.1	0.0	0.7	0.1	0.0	2.4	1.5	-3.9	0.0	2.4	1.5	-3.9	
Fm Line	Col Line	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seis_Left Horz	Seis_Right Horz	MIN_SNOW		LWIND1_L		LWIND1_R			
							Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
4	F	1.1	-0.9	-0.5	0.0	0.0	0.0	0.0	0.2	0.0	-0.4	0.0		
4	E	2.0	-2.3	-1.4	0.0	0.0	0.0	0.0	0.5	0.0	-0.2	0.0		
4	C	1.9	-2.2	-1.3	0.1	-0.2	0.0	0.2	0.0	0.5	0.0	0.1		
4	A	1.0	-0.8	-0.5	0.0	0.2	0.1	-0.2	0.0	0.2	0.0	-0.1		
Fm Line	Col Line	LWIND2_L		LWIND2_R		LWIND2_L		LWIND2_R						
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert					
4	F	0.0	-0.4	0.0	0.0									
4	E	0.0	-0.2	0.0	0.0									
4	C	0.0	0.1	0.0	-0.3									
4	A	0.0	-0.1	0.0	-0.3									

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

Fm Line	Col Line	Column Reactions (k)			Hmin H	V Vmin	Anc Bolt Qty	Dia	Base Plate (in)			Grout (in)	
		Load ID	Hmax H	V Vmax					Load ID	Width	Length		Thick
1	A	10	0.8	-4.0	11	-0.7	-0.6	2	0.825	3.500	10.00	0.250	0.0
		12	0.8	2.9	10	0.6	-4.0						
1	B	12	1.6	-4.3	11	-1.5	-1.5	2	0.825	3.500	10.00	0.250	0.0
		13	1.2	2.1	12	1.6	-4.3						
1	D	12	2.2	-2.8	11	-2.0	-2.3	2	0.825	3.500	10.00	0.250	0.0
		1	0.0	2.6	12	2.2	-2.8						
1	F	12	1.3	-1.2	11	-1.2	-1.0	2	0.825	3.500	10.00	0.250	0.0
		1	0.0	1.1	12	1.3	-1.2						
4	F	10	1.1	-1.0	11	-0.9	-0.8	2	0.825	3.500	8.000	0.250	0.0
		1	0.0	0.9	10	1.1	-1.0						
4	E	10	2.0	-2.8	11	-1.8	-2.1	2	0.825	3.500	8.000	0.250	0.0
		1	0.0	2.4	10	2.0	-2.8						
4	C	10	1.9	-4.4	11	-1.7	-2.0	2	0.825	3.500	8.000	0.250	0.0
		1	0.0	2.2	10	1.9	-4.4						
4	A	12	1.0	-3.8	11	-0.8	-0.7	2	0.825	3.500	8.000	0.250	0.0
		10	1.0	2.5	12	1.0	-3.8						

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	01/01/13	DRAF	CHKR	DES



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DESCRIPTION		ANCHOR BOLT REACTIONS	
CUSTOMER	DEALER		
END USER	PROJECT		
END USE			
LOCATION			
DES BY: DES	DATE: 2/20/13	ENG BY: DES	DATE: 2/20/13
JOB NO: 53168	SCALE: N.T.S.	DWG NO: OF	ISSUE: A