

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	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 Sheets	A792/A653	Fy = 50, 80 KSI
Cable Brace	A475 – TYPE 1	Extra High Strength
Rod Brace	A36	Fy = 36 KSI
		MIN. TENSILE STRENGTH
Machine Bolts & Nuts	A307	Fu = 60 KSI
High Strength Bolts (1"Ø and less)	A325–TYPE 1	Fu = 120 KSI
High Strength Bolts (>1"Ø to 1 1/2"Ø)	A325–TYPE 1	Fu = 105 KSI
Anchor Bolts (if supplied)	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. (Section 6.5 AISC Code of Standard Practice, 9th 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"Ø x 0'-1 1/4" A307 EXCEPT :

a) Eave strut connection – 1/2"Ø x 0'-1 1/4" A307

b) Endwall rafter splice – 5/8"Ø x 0'-1 3/4" A325–N

c) Endwall column to rafter connection – 1/2"Ø x 0'-1 1/4" A325–N

d) Main frame connections – SEE CROSS SECTION

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.

Structural bolts shall be tightened by the turn–of–the–nut method in accordance with the 9th 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 FOR APPLICATION:

INSIDE– Under roof panels at eave & base

OUTSIDE – Between endwall panels and rake trim

– Under continuous ridge vent skirts
- 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, 9th 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.



PHONE: 800–345–4610
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DRAWING PACKAGE

JOB NO. : 52834

CUSTOMER : COOPER BEARINGS

END USER : POWER RAIL DIST/COOPER BEARING

END USE : MANUFACTURING

LOCATION : LOT 25A – 2169 BALTIMORE AVE

: GEORGETOWN, DE 19971

: SUSSEX COUNTY

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

DESIGN LOADS:

Design Code	: IBC–03
Enclosure	: Closed
Dead Load (psf)	: 2.00
Collateral Load (psf)	: 1.00
Wind Load	
Basic Wind Speed, 3 sec gust	: 100.00
Wind Importance Factor, Iw	: 1.00
Wind Exposure	: C
Internal Pressure Coefficient, GCPI	: +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)	: 28.57
Roof Snow Load, Pf (psf)	: 20.00
Sloped Roof Snow Load, Ps (psf)	: 20.00
Snow Exposure Factor, Ce	: 1.00
Snow Importance Factor, Is	: 1.00
Thermal Factor, Ct	: 1.00
Sloped Factor, Cs	:
Seismic Load	
Seismic Importance Factor, Ie	: 1.00
Seismic Use Group	: II – Normal
Site Class	: D
Mapped Spectral Response Acceleration	: Ss = 0.13 :S1 = 0.04
Spectral Response Coefficients	: Sds = 0.14 :Sd1 = 0.07
Seismic Design Category	: B
Basic Force Resisting Systems Used	: Steel System Not Specifically Detailed For Resistance

Total Design Base Shear, V (kips)

: Longitudinal = 2.51

: Transverse = 2.54

Response Modification Factors, R

: Rigid Frames = 3.00 Omega = 3.00

: SW X–Bracing = 3.00 Omega = 3.00

Seismic Response Coefficient, Cs

: Rigid Frames = 0.0462

: SW X–Bracing = 0.0462

Analysis Procedure Used

Other Loads/Requirements

: Equivalent Lateral Force Procedure

THIS DRAWING WAS PRODUCED
BY AND/OR UNDER THE DIRECT
SUPERVISION OF NANGIA P.E.

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7423 HOLLOW RIDGE DR
HOUSTON, TX 77095

- 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 (Section 4 and Commentary, AISC Code of Standard Practice, 9th Edition)
- 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. (Section 7 AISC Code of Standard Practice, 9th 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. (Section A10 1996 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. (Section 7 AISC Code of Standard Practice, 9th 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. (Section 7 AISC Code of Standard Practice, 9th 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.

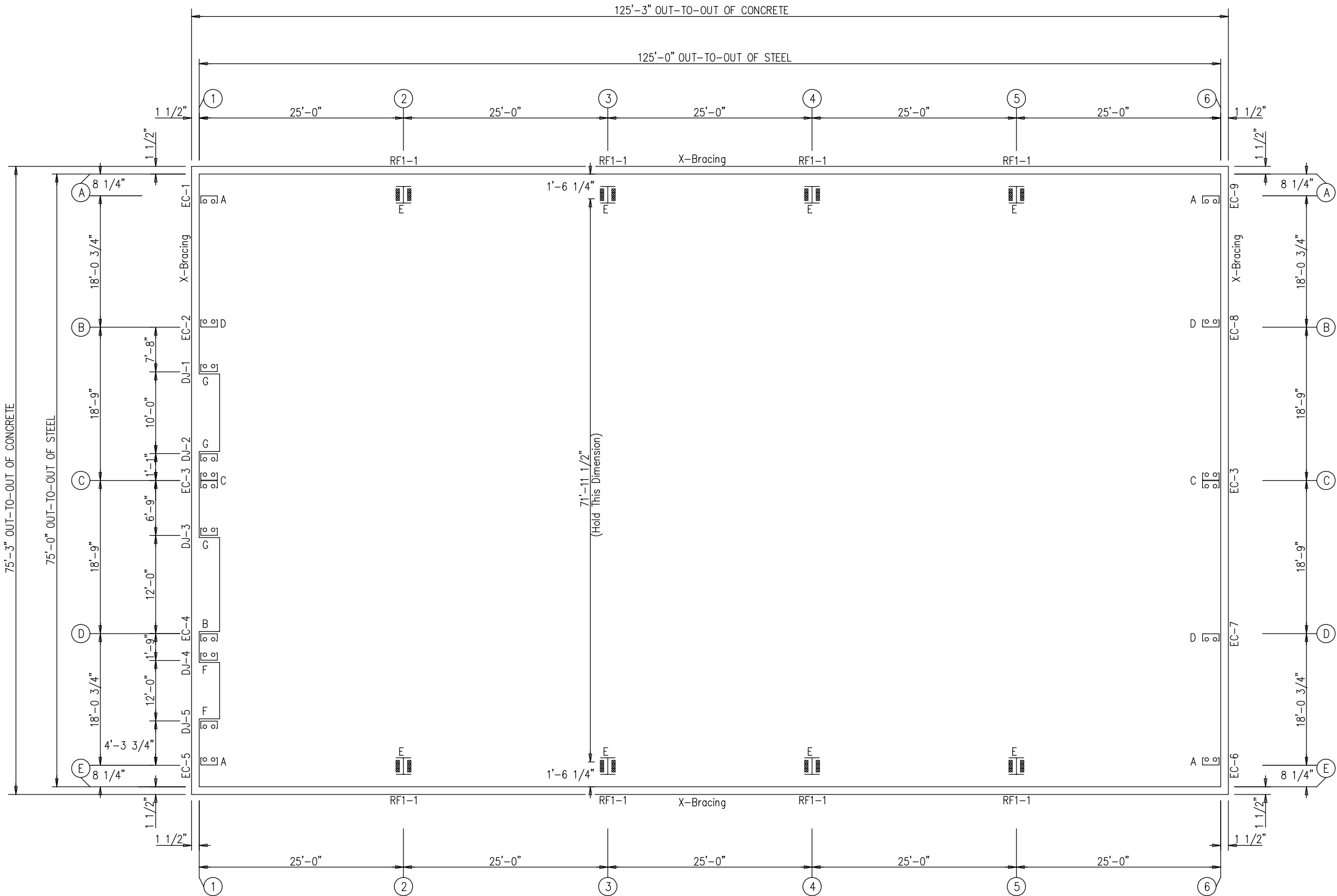
ROOF SNOW LOAD (IN PSF)	EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD START (IN INCHES)
20	16.60	8.30
25	17.25	8.62
30	17.90	8.95
35	18.55	9.28
40	19.20	9.60
45	19.85	9.92
50	20.50	10.25
55	21.15	10.58
60	21.80	10.90
65	22.45	11.22
70	23.10	11.55
75	23.75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

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 : 52834

COOPER BEARINGS



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

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type
○ 10	Jamb	5/8"	
○ 24	Endwall	5/8"	A307
⊗ 48	Frame	3/4"	A307

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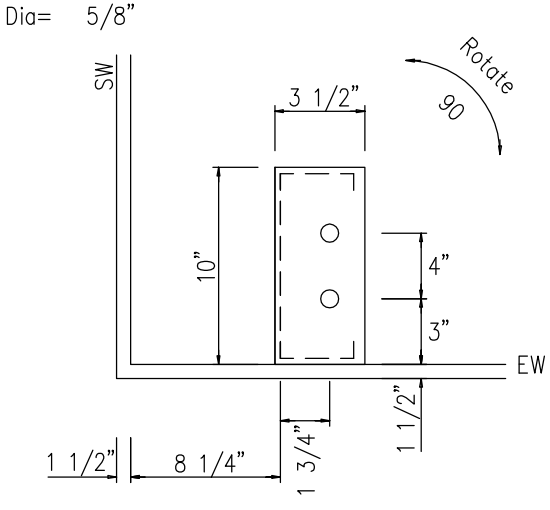
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ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	02.16.12	RAJ	RAJ	NANG
O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG
RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG

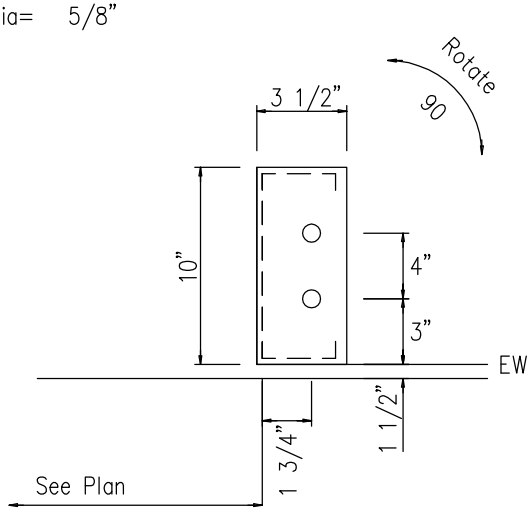


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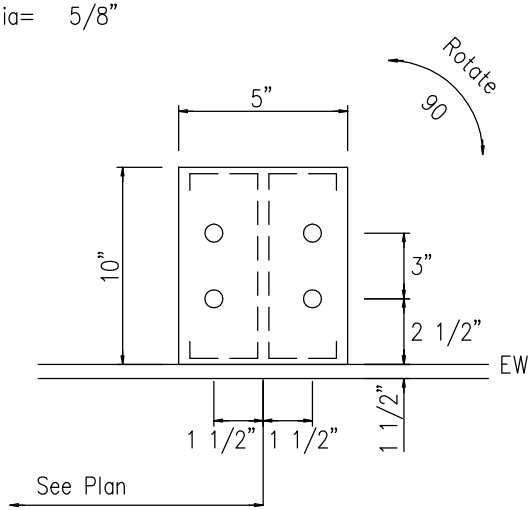
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CUSTOMER	COOPER BEARINGS
END USER	POWER RAIL DIST/COOPER BEARING
END USE	MANUFACTURING
LOCATION	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971
DRN. BY: RAJ	DATE: 2/16/12
JOB NO.: 52834	SCALE: N.T.S.
ENG. BY: NANG	DATE: 2/16/12
DWG. NO.: 1 OF 11	ISSUE: RC



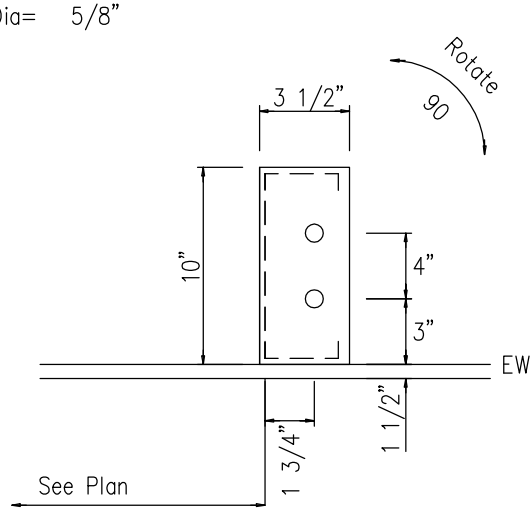
DETAIL A



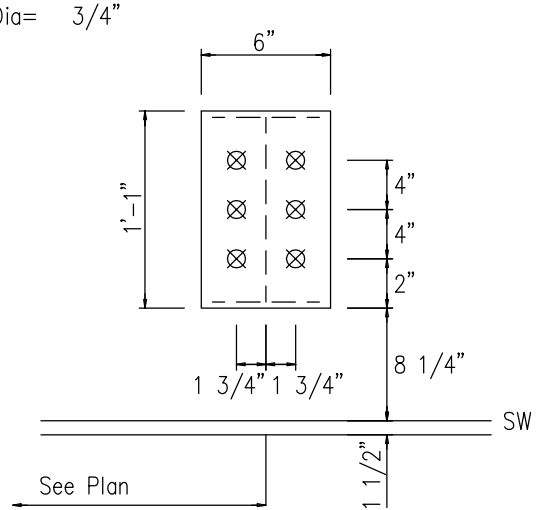
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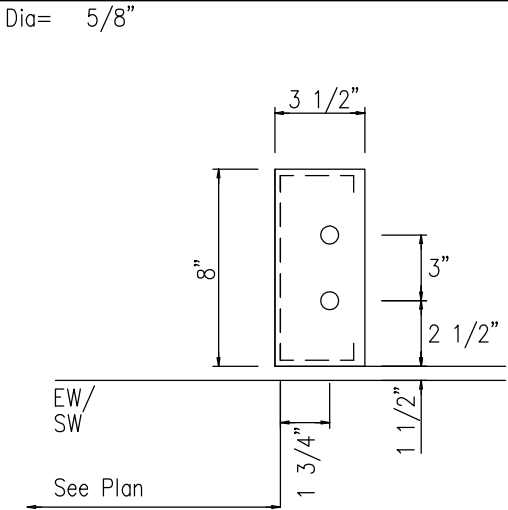
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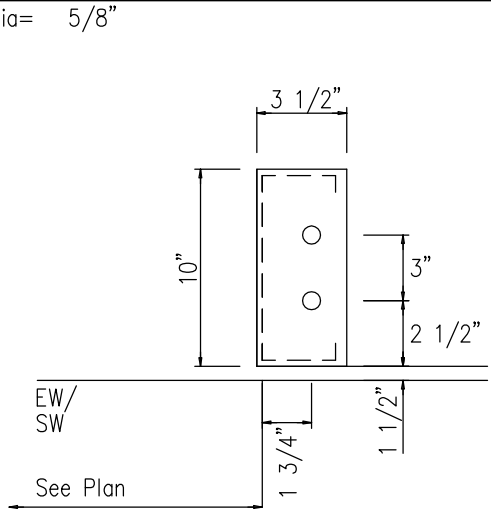
DETAIL D



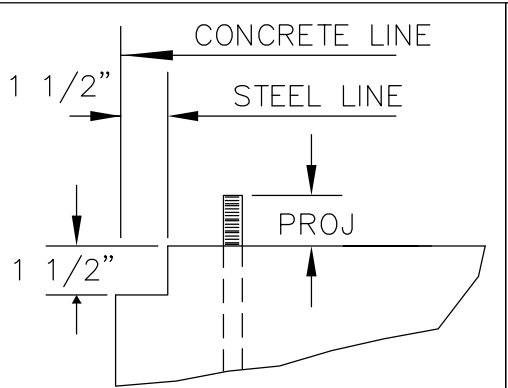
DETAIL E



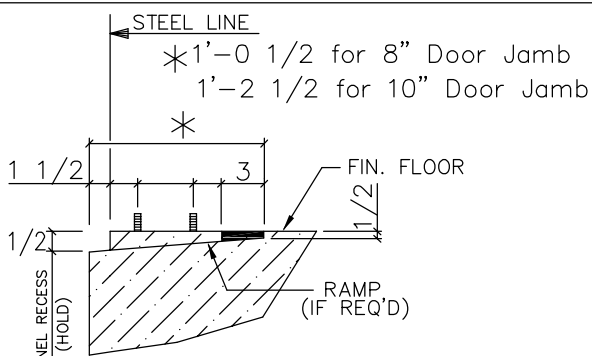
DETAIL F



DETAIL G



CONCRETE NOTCH AND ANCHOR BOLT PROJECTION



CONCRETE NOTCH DETAIL AT OVERHEAD DOOR

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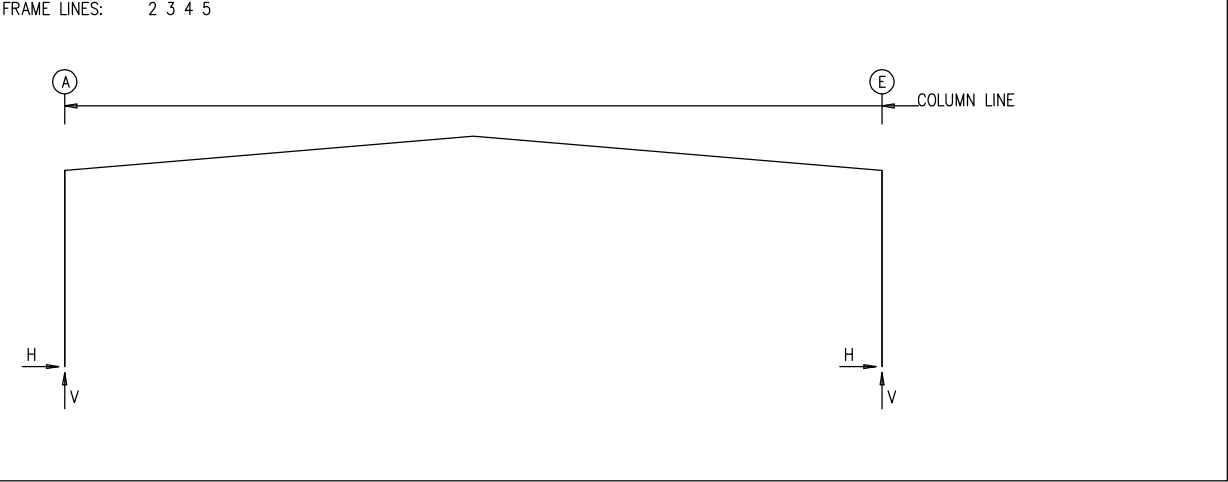
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DESCRIPTION	ANCHOR BOLT DETAILS
CUSTOMER	COOPER BEARINGS
END USER	POWER RAIL DIST/COOPER BEARING
END USE	MANUFACTURING
LOCATION	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971
DRN. BY: RAJ	DATE: 2/16/12
JOB NO.: 52834	SCALE: N.T.S.
ENG. BY: NANG	DATE: 2/16/12
DWG. NO.: 2 OF 11	ISSUE: RC



RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES													
Frm Line	Col Line	Column Reactions (k)											
		Load ID	Hmax H	V Vmax	Load ID	Hmin H	V Vmin	Anc. Bolt Qty	Bolt Dia	Base_Plate Width	Length (in)	Thick	Grout (in)
2*	A	1	17.0	23.0	3	-10.5	-12.8	6	0.750	6.000	13.00	0.500	0.0
		8	16.8	29.3	5	-8.0	-19.7						
2*	E	4	10.5	-12.8	2	-17.0	23.0	6	0.750	6.000	13.00	0.500	0.0
		7	-16.8	29.3	6	8.0	-19.7						
2*	Frame lines: 2 3 4 5												

RIGID FRAME: BASIC COLUMN REACTIONS (k)													
Frame Line	Column Line	---Dead---		---Collateral---		---Live---		---Snow---		---Wind_L1---		---Wind_R1---	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2*	A	2.1	3.3	0.7	0.9	14.2	18.7	14.2	18.7	-11.8	-14.8	-6.3	-10.6
2*	E	-2.1	3.3	-0.7	0.9	-14.2	18.8	-14.2	18.8	6.3	-10.6	11.8	-14.8
Frame Line	Column Line	--Wind_L2--		--Wind_R2--		---LnWind1---		---LnWind2---		--Seismic_L--		--Seismic_R--	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2*	A	-8.5	-8.4	-3.0	-4.2	-9.0	-19.3	-5.7	-12.9	-0.2	-0.1	0.2	0.1
2*	E	3.0	-4.2	8.5	-8.4	9.0	-19.3	5.7	-12.9	-0.2	0.1	0.2	-0.1
Frame Line	Column Line	---LnSeis---		-LWIND1_L2E-		-LWIND1_R2E-		-LWIND2_L2E-		-LWIND2_R2E-		-F1UNB_SL_R-	
		Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
2*	A	0.0	-0.8	-0.3	-2.3	-0.5	-0.3	-0.3	-2.3	-0.5	-0.3	14.0	11.9
2*	E	0.0	-0.8	0.5	-0.3	0.3	-2.3	0.5	-0.3	0.3	-2.3	-14.0	25.1
Frame Line	Column Line	-F1UNB_SL_L-											
		Horiz	Vert										
2*	A	14.0	25.1										
2*	E	-14.0	11.9										
2*	Frame lines: 2 3 4 5												

BUILDING BRACING REACTIONS

Wall Loc	Col Line	Reactions (k)				Panel Shear (lb/ft)
		Wind Horiz	Wind Vert	Seismic Horiz	Seismic Vert	
L_EW	1	A,B	2.1	1.9	0.3	0.3
F_SW	E	3,4	5.8	3.7	1.3	0.8
R_EW	6	B,A	2.1	1.9	0.3	0.3
B_SW	A	4,3	5.8	3.7	1.3	0.8

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type
○ 10	Jamb	5/8"	A307
○ 24	Endwall	5/8"	
⊗ 48	Frame	3/4"	

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)													
Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Rafter Wind_L Vert	Rafter Wind_R Vert	Brace Wind_L Horiz	Brace Wind_L Vert	Brace Wind_R Horiz	Brace Wind_R Vert	Wind_P Horiz	Wind_S Horiz
1	A	0.4	0.1	1.9	1.9	-2.2	-1.3	2.1	-4.0	0.0	0.6	-1.3	1.5
1	B	1.0	0.3	5.3	5.3	-6.1	-3.4	0.0	-4.3	2.1	-5.2	-2.8	3.0
1	C	0.9	0.2	4.5	4.5	-3.9	-3.9	0.0	-3.9	0.0	-3.9	-3.1	3.4
1	D	1.0	0.3	5.3	5.3	-3.3	-6.1	0.0	-3.3	0.0	-6.1	-2.8	3.0
1	E	0.4	0.1	1.9	1.9	-1.3	-2.2	0.0	-1.3	0.0	-2.2	-1.3	1.5
Frm Line	Col Line	LnWind1 Vert	LnWind2 Vert	Seis_L Horiz	Seis_L Vert	Seis_R Horiz	Seis_R Vert	E1UNB_SL_R Horiz	E1UNB_SL_R Vert	E1UNB_SL_L Horiz	E1UNB_SL_L Vert	E1PAT_LL_3 Horiz	E1PAT_LL_3 Vert
1	A	-1.6	-1.0	0.3	-0.3	0.0	0.3	0.0	0.7	0.0	3.2	0.0	1.9
1	B	-4.4	-2.6	0.0	0.3	0.3	-0.3	0.0	1.2	0.0	9.2	0.0	5.6
1	C	-3.7	-2.2	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.5	0.0	2.3
1	D	-4.4	-2.6	0.0	0.0	0.0	0.0	0.0	9.2	0.0	1.2	0.0	-0.3
1	E	-1.6	-1.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.6	0.0	0.0
Frm Line	Col Line	E1PAT_LL_4 Horiz	E1PAT_LL_4 Vert	E1PAT_LL_5 Horiz	E1PAT_LL_5 Vert	E1PAT_LL_6 Horiz	E1PAT_LL_6 Vert	E1PAT_LL_7 Horiz	E1PAT_LL_7 Vert	LWIND1_L Horiz	LWIND1_L Vert	LWIND1_R Horiz	LWIND1_R Vert
1	A	0.0	-0.2	0.0	0.0	0.0	2.2	0.0	-0.3	0.0	-0.7	0.0	0.0
1	B	0.0	2.2	0.0	-0.3	0.0	2.6	0.0	2.7	0.0	-0.7	0.0	0.0
1	C	0.0	5.5	0.0	2.3	0.0	2.3	0.0	2.3	0.0	0.1	0.0	0.2
1	D	0.0	2.2	0.0	5.6	0.0	2.7	0.0	2.6	0.0	0.0	-0.7	0.0
1	E	0.0	-0.2	0.0	1.9	0.0	-0.3	0.0	2.2	0.0	0.0	-0.8	0.0
Frm Line	Col Line	LWIND2_R Horiz	LWIND2_R Vert										
1	A	0.0	0.0										
1	B	0.0	0.0										
1	C	0.0	0.2										
1	D	0.0	-0.7										
1	E	0.0	-0.8										
Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Rafter Wind_L Vert	Rafter Wind_R Vert	Brace Wind_L Horiz	Brace Wind_L Vert	Brace Wind_R Horiz	Brace Wind_R Vert	Wind_P Horiz	Wind_S Horiz
6	E	0.4	0.1	1.9	1.9	-2.2	-1.3	0.0	-2.2	0.0	-1.3	-1.3	1.5
6	D	1.0	0.3	5.3	5.3	-6.1	-3.3	0.0	-6.1	0.0	-3.3	-2.8	3.0
6	C	0.9	0.2	4.5	4.5	-3.9	-3.9	0.0	-3.9	0.0	-3.9	-3.1	3.4
6	B	1.0	0.3	5.3	5.3	-3.4	-6.1	2.1	-5.2	0.0	-4.3	-2.8	3.0
6	A	0.4	0.1	1.9	1.9	-1.3	-2.2	0.0	0.6	2.1	-4.0	-1.3	1.5
Frm Line	Col Line	LnWind1 Vert	LnWind2 Vert	Seis_L Horiz	Seis_L Vert	Seis_R Horiz	Seis_R Vert	E2UNB_SL_R Horiz	E2UNB_SL_R Vert	E2UNB_SL_L Horiz	E2UNB_SL_L Vert	E2PAT_LL_3 Horiz	E2PAT_LL_3 Vert
6	E	-1.6	-1.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	3.2	0.0	1.9
6	D	-4.4	-2.6	0.0	0.0	0.0	0.0	0.0	1.2	0.0	9.2	0.0	5.6
6	C	-3.7	-2.2	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.5	0.0	2.3
6	B	-4.4	-2.6	0.3	-0.3	0.0	0.3	0.0	9.2	0.0	1.2	0.0	-0.3
6	A	-1.6	-1.0	0.0	0.3	0.3	-0.3	0.0	3.2	0.0	0.7	0.0	0.0
Frm Line	Col Line	E2PAT_LL_4 Horiz	E2PAT_LL_4 Vert	E2PAT_LL_5 Horiz	E2PAT_LL_5 Vert	E2PAT_LL_6 Horiz	E2PAT_LL_6 Vert	E2PAT_LL_7 Horiz	E2PAT_LL_7 Vert	LWIND1_L Horiz	LWIND1_L Vert	LWIND1_R Horiz	LWIND1_R Vert
6	E	0.0	-0.2	0.0	0.0	0.0	2.2	0.0	-0.3	0.0	-0.8	0.0	0.0
6	D	0.0	2.2	0.0	-0.3	0.0	2.6	0.0	2.7	0.0	-0.7	0.0	0.0
6	C	0.0	5.5	0.0	2.3	0.0	2.3	0.0	2.3	0.0	0.2	0.0	0.1
6	B	0.0	2.2	0.0	5.6	0.0	2.7	0.0	2.6	0.0	0.0	-0.7	0.0
6	A	0.0	-0.2	0.0	1.9	0.0	-0.3	0.0	2.2	0.0	0.0	-0.7	0.0
Frm Line	Col Line	LWIND2_R Horiz	LWIND2_R Vert										
6	E	0.0	0.0										
6	D	0.0	0.0										
6	C	0.0	0.1										
6	B	0.0	-0.7										
6	A	0.0	-0.7										

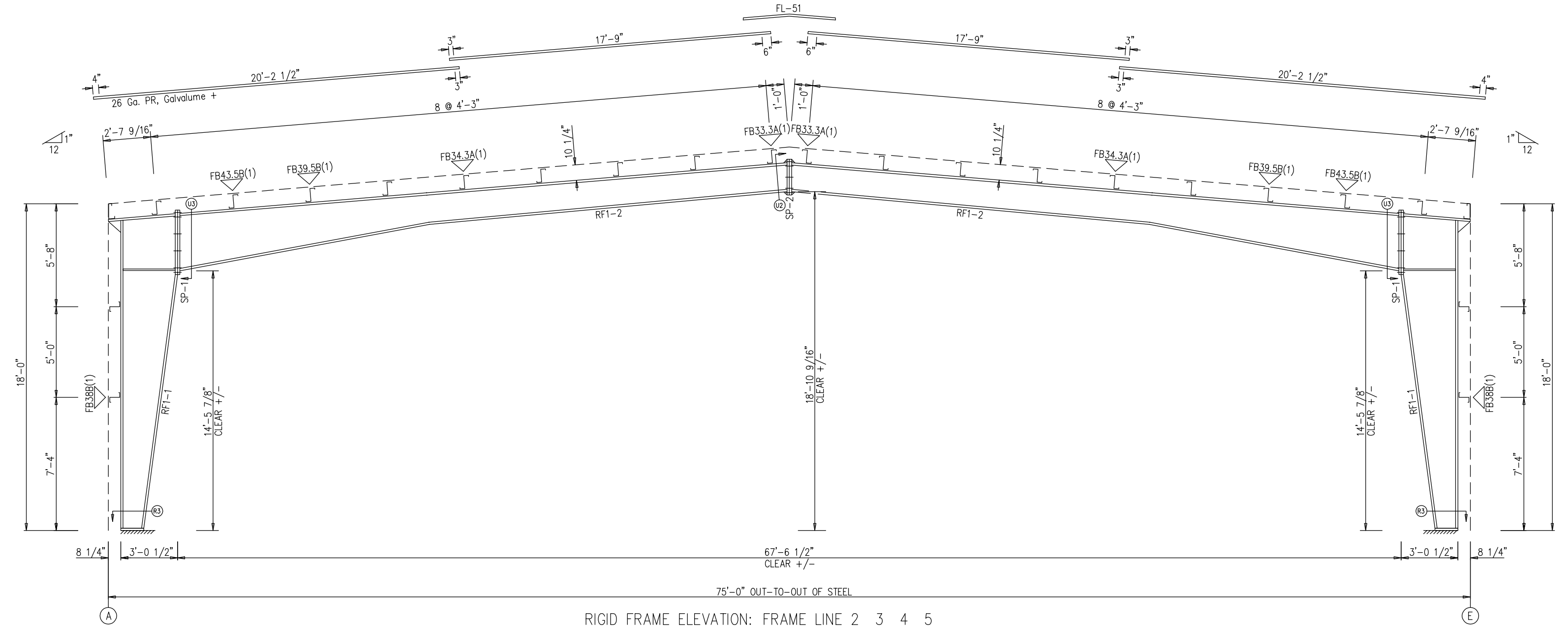
ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column Reactions (k)						Anc. Qty	Bolt Dia	Base_Plate (in)			Grout (in)
		Load ID	Hmax H	V Vmax	Load ID	Hmin H	V Vmin			Width	Length	Thick	
1	A	9	1.5	-3.8	10	-1.3	-1.4	2	0.625	3.500	10.00	0.250	0.0
		11	0.0	3.7	9	1.5	-3.8						
1	B	12	3.0	-5.6	10	-2.8	-3.9	2	0.625	3.500	10.00	0.250	0.0
		11	0.0	10.4	12	3.0	-5.6						
1	C	9	3.4	-3.4	10	-3.1	-3.1	4	0.625	5.000	10.00	0.250	0.0
		2	0.0	5.6	9	3.4	-3.4						
1	D	13	3.0	-5.6	10	-2.8	-3.9	2	0.625	3.500	10.00	0.250	0.0
		14	0.0	10.4	13	3.0	-5.6						
1	E	13	1.5	-2.0	10	-1.3	-1.4	2	0.625	3.500	10.00	0.250	0.0
		14	0.0	3.7	13	1.5	-2.0						
6	E	9	1.5	-2.0	10	-1.3	-1.4	2	0.625	3.500	10.00	0.250	0.0
		15	0.0	3.7	9	1.5	-2.0						
6	D	9	3.0	-5.6	10	-2.8	-3.9	2	0.625	3.500	10.00	0.250	0.0
		15	0.0	10.4	9	3.0	-5.6						
6	C	13	3.4	-3.4	10	-3.1	-3.1	4	0.625	5.000	10.00	0.250	0.0
		2	0.0	5.6	13	3.4	-3.4						
6	B	16	3.0	-5.6	10	-2.8	-3.9	2	0.625	3.500	10.00	0.250	0.0
		17	0.0	10.4	16	3.0	-5.6						
6	A	13	1.5	-3.8	10	-1.3	-1.4	2	0.625	3.500	10.00	0.250	0.0
		17	0.0	3.7	13	1.5	-3.8						

SPlice Bolt Table						
Mark	Qty	Top	Bot	Int	Type	Dia
SP-1	4	4	4	4	A325	0.750
SP-2	4	4	4	2	A325	0.625

▽FLANGE BRACES: Both Sides(U.N.)
FBxxB(1): xx=length(in)
B - L2x2x1/8
A - L2x2x14G

MEMBER TABLE					
Mark	Web Depth	Web Plate		Outside Flange	Inside Flange
	Start/End	Thick	Length	W x Thk x Length	W x Thk x Length
RF1-1	12.0/29.0	0.188	120.0	6 x 1/4" x 205.6	6 x 5/16" x 125.2
RF1-2	29.0/36.0	0.250	88.6	6 x 1/4" x 44.6	6 x 1/4" x 45.8
	35.0/18.0	0.250	167.8	6 x 1/4" x 160.9	6 x 1/4" x 168.7
	18.0/16.0	0.188	240.0	6 x 5/16" x 220.0	6 x 1/4" x 238.6



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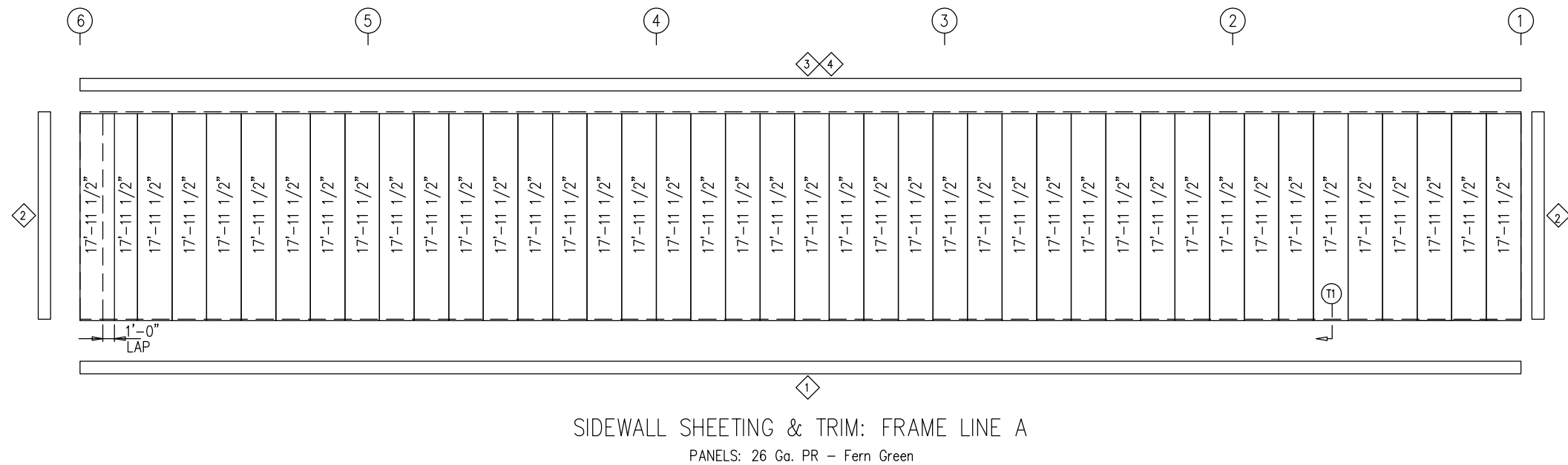
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	02.16.12	RAJ	RAJ	NANG
O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG
RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG



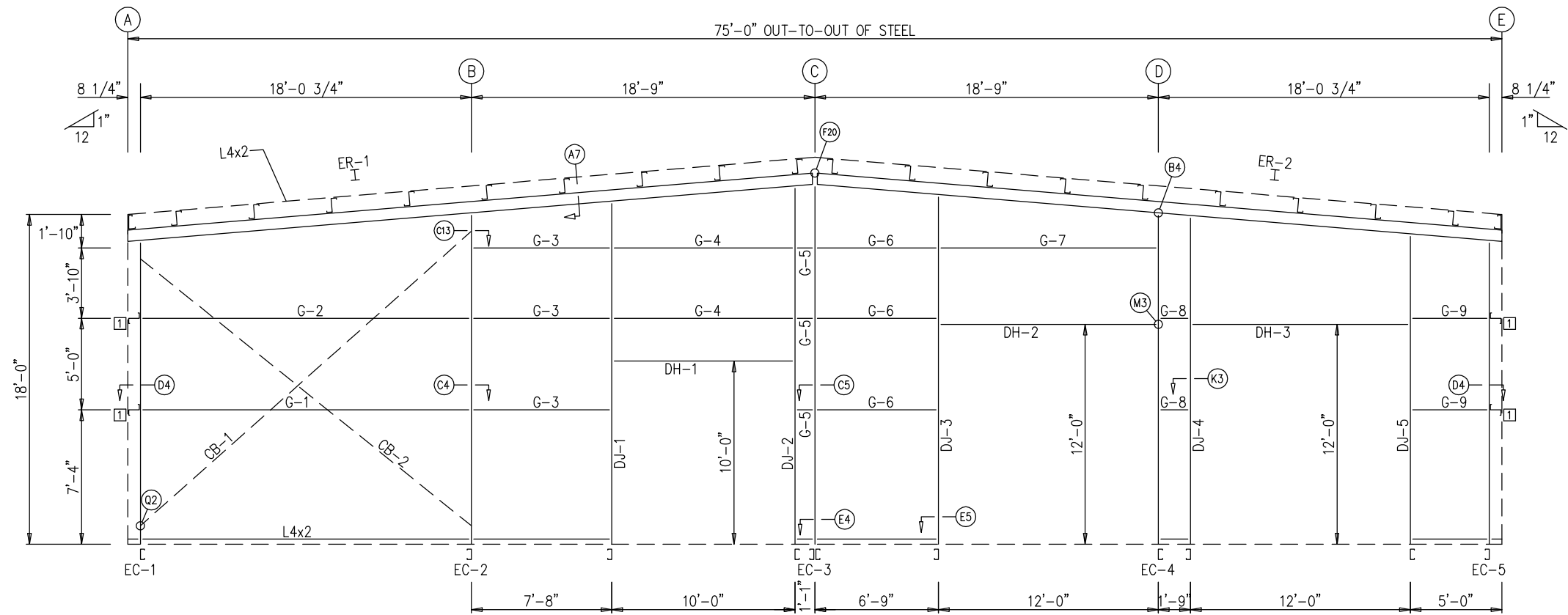
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DESCRIPTION	RIGID FRAME ELEVATION						
CUSTOMER	COOPER BEARINGS						
END USER	POWER RAIL DIST/COOPER BEARING						
END USE	MANUFACTURING						
LOCATION	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971						
DRN. BY:	RAJ	DATE:	2/16/12	ENG. BY:	NANG	DATE:	2/16/12
JOB NO.:	52834	SCALE:	N.T.S.	DWG. NO.:	4 OF 11	ISSUE:	RC

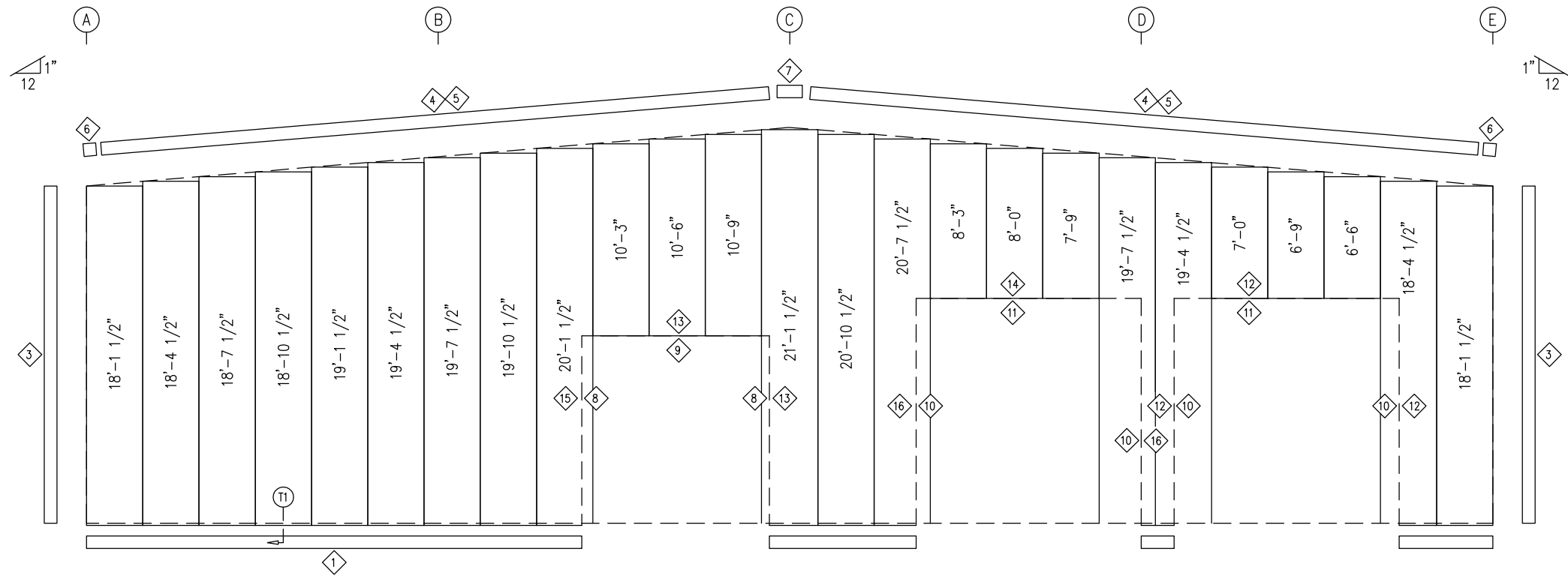
MEMBER TABLE		
FRAME LINE A		
MARK	PART	LENGTH
E-1	10ES1L14	24'-11 1/2"
E-2	10ES1L14	24'-11 1/2"
E-3	10ES1L14	24'-11 1/2"
G-12	8X25Z12	26'-1 1/2"
G-13	8X25Z14	27'-3 1/2"
G-14	8X25Z16	27'-3 1/2"
CB-3	HW-375	30'-4 1/4"



DESCRIPTION		SIDEWALL FRAMING & SHEETING	
CUSTOMER		COOPER BEARINGS	
END USER		POWER RAIL DIST/COOPER BEARING	
END USE		MANUFACTURING	
LOCATION		LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971	
DRN. BY:	RAJ	DATE:	2/16/12
JOB NO.:	52834	SCALE:	N.T.S.
		DWG. NO.:	6 OF 11
		ENG. BY:	NANG
		DATE:	2/16/12
		ISSUE:	RC



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. PR - Fern Green

BOLT TABLE FRAME LINE 1				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	5/8"	1 1/2"
Jamb	2	A325	5/8"	1 1/2"

TRIM TABLE FRAME LINE 1			
ID	PART	LENGTH	DETAIL
1	FL-72	10'-2"	TRIM_25 TRIM_23 TRIM_23 TRIM_150 TRIM_106 TRIM_30 TRIM_31 TRIM_30 TRIM_31
3	FL-834	18'-0"	
4	FL-16D	20'-2"	
5	XFL-16	18'-3"	
6	FL-16A	6"	
7	FL-16B	1'-4"	
8	FL-23	10'-2"	
9	FL-852	10'-4"	
10	FL-23C	14'-2"	
11	FL-853	12'-4"	
12	FL-37	10'-2"	
13	FL-39	10'-0"	
14	FL-39	12'-0"	
15	FL-38	10'-0"	
16	FL-38	12'-0"	

MEMBER TABLE FRAME LINE 1		
MARK	PART	LENGTH
EC-1	10X25C14	16'-4 1/4"
EC-2	10X35C12	17'-10 5/16"
EC-3	10X50D14	19'-2 13/16"
EC-4	10X35C12	17'-10 5/16"
EC-5	10X25C14	16'-4 1/4"
ER-1	W8X15	37'-7 5/16"
ER-2	W8X15	37'-7 5/16"
DJ-1	10X35C14	18'-6"
DJ-2	10X25C14	19'-4"
DJ-3	10X35C14	18'-10 5/16"
DJ-4	8X35C14	17'-8 9/16"
DJ-5	8X35C14	16'-8 9/16"
DH-1	10X25C14	10'-0"
DH-2	10X25C14	12'-0"
DH-3	8X25C16	12'-0"
G-1	8X25Z12	17'-4 3/4"
G-2	8X25Z14	17'-4 3/4"
G-3	8X25Z16	7'-3 3/4"
G-4	8X25Z16	9'-11 1/2"
G-5	8X25Z16	5"
G-6	8X25Z16	6'-1"
G-7	8X25Z16	11'-11 1/2"
G-8	8X25Z16	1'-1"
G-9	8X25Z16	3'-7 3/4"
CB-1	HW-373	24'-6 1/4"
CB-2	HW-373	23'-6 3/4"

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

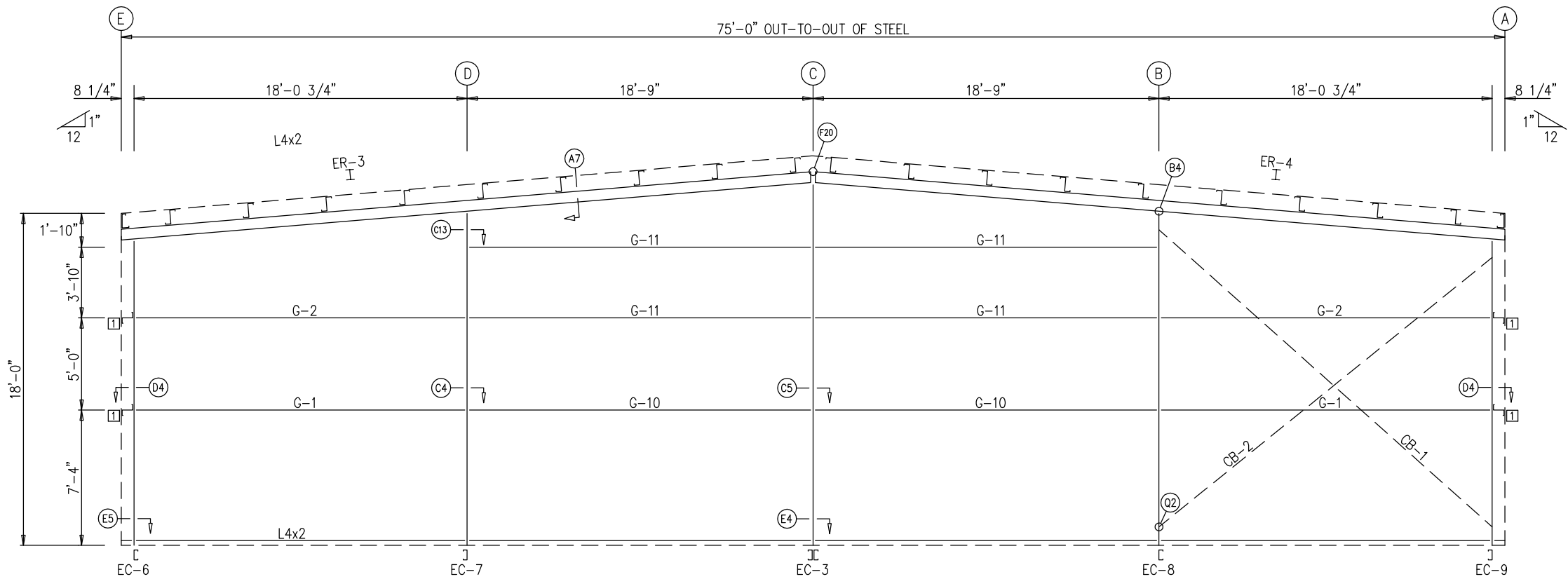
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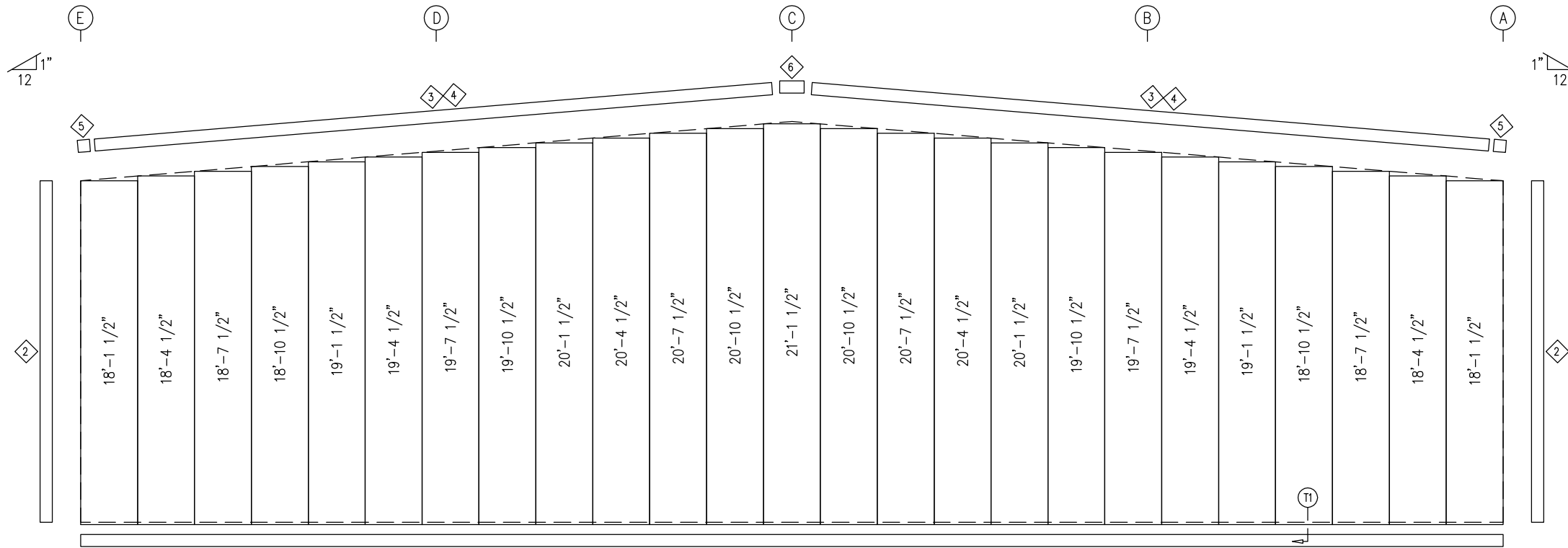
ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.	DESCRIPTION	ENDWALL FRAMING & SHEETING
A	APPROVAL/PERMIT	02.16.12	RAJ	RAJ	NANG	CUSTOMER	COOPER BEARINGS
O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG	END USER	POWER RAIL DIST/COOPER BEARING
RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG	END USE	MANUFACTURING
						LOCATION	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971
						DRN. BY:	RAJ
						DATE:	2/16/12
						ENG. BY:	NANG
						SCALE:	N.T.S.
						DWG. NO.:	7 OF 11
						ISSUE:	RC



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ENDWALL FRAMING: FRAME LINE 6



ENDWALL SHEETING & TRIM: FRAME LINE 6

PANELS: 26 Ga. PR - Fern Green

BOLT TABLE FRAME LINE 6				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-3/ER-4	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	5/8"	1 1/2"

TRIM TABLE FRAME LINE 6			
ID	PART	LENGTH	DETAIL
1	FL-72	10'-2"	
2	FL-834	18'-0"	TRIM_25
3	FL-16D	20'-2"	TRIM_23
4	XFL-16	18'-3"	TRIM_23
5	FL-16A	6"	TRIM_150
6	FL-16B	1'-4"	TRIM_106

MEMBER TABLE FRAME LINE 6		
MARK	PART	LENGTH
EC-3	10X50D14	19'-2 13/16"
EC-6	10X25C14	16'-4 1/4"
EC-7	10X35C12	17'-10 5/16"
EC-8	10X35C12	17'-10 5/16"
EC-9	10X25C14	16'-4 1/4"
ER-3	W8X15	37'-7 5/16"
ER-4	W8X15	37'-7 5/16"
G-1	8X25Z12	17'-4 3/4"
G-2	8X25Z14	17'-4 3/4"
G-10	8X25Z12	18'-4 3/4"
G-11	8X25Z16	18'-4 3/4"
CB-1	HW-373	24'-6 1/4"
CB-2	HW-373	23'-6 3/4"

CONNECTION PLATES FRAME LINE 6	
ID	MARK/PART
1	SC-5

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ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.	DESCRIPTION	ENDWALL FRAMING & SHEETING
A	APPROVAL/PERMIT	02.16.12	RAJ	RAJ	NANG	CUSTOMER	COOPER BEARINGS
O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG	END USER	POWER RAIL DIST/COOPER BEARING
RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG	END USE	MANUFACTURING
						LOCATION	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971
						DRN. BY:	RAJ
						DATE:	2/16/12
						ENG. BY:	NANG
						DATE:	2/16/12
						JOB NO.:	52834
						SCALE:	N.T.S.
						DWG. NO.:	8 OF 11
						ISSUE:	RC

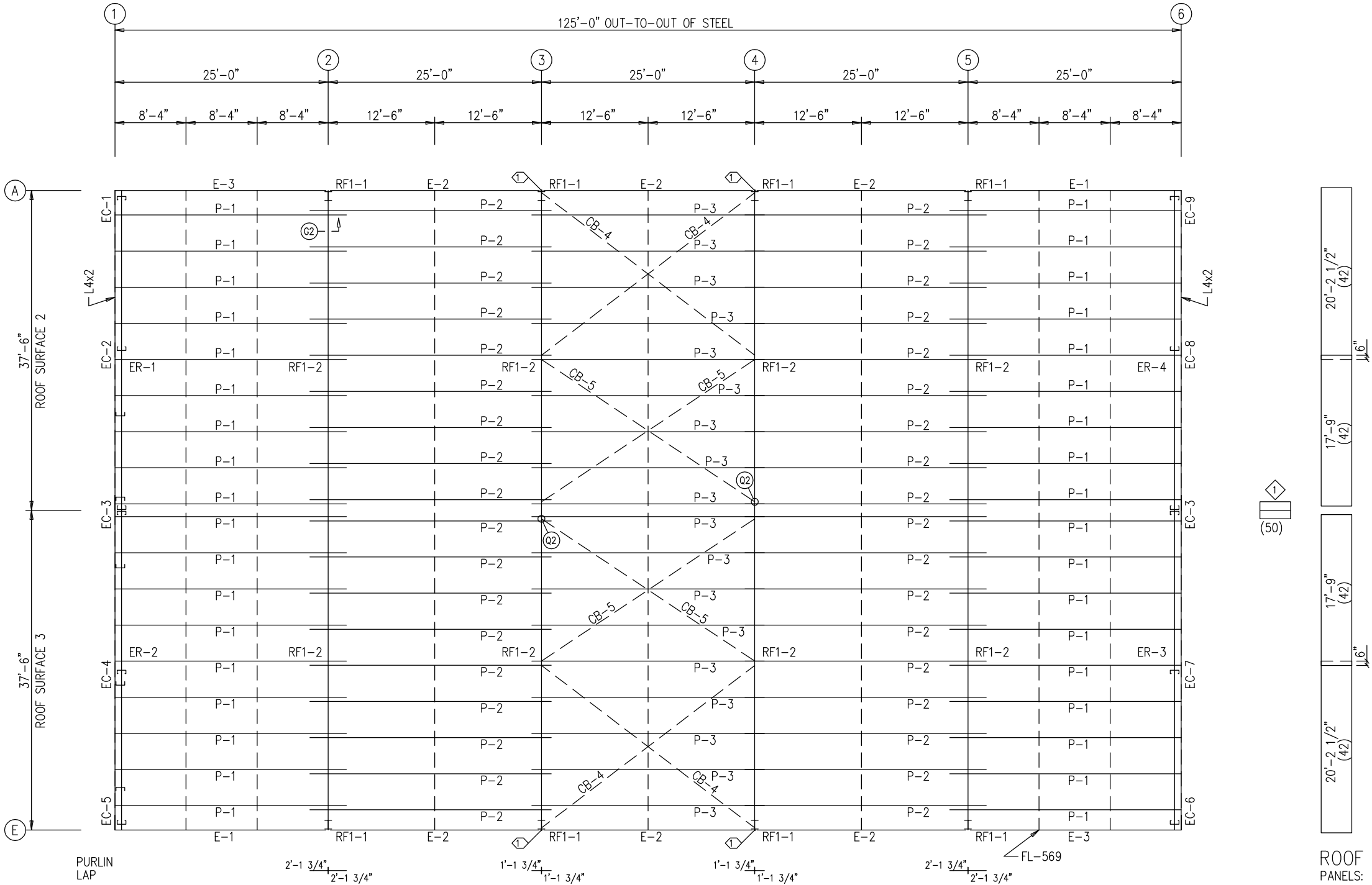


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TRIM TABLE			
ROOF PLAN			
◇ ID	PART	LENGTH	DETAIL
1	FL-51	3'-0"	TRIM_80

SPECIAL BOLTS					
ROOF PLAN					
◇ ID	QUAN	TYPE	DIA	LENGTH	WASH
1	2	A325	1/2"	1 1/4"	2

MEMBER TABLE		
ROOF PLAN		
MARK	PART	LENGTH
P-1	10X25Z14	27'-1 1/2"
P-2	10X25Z14	28'-3 1/2"
P-3	10X25Z14	27'-3 1/2"
E-1	10ES1L14	24'-11 1/2"
E-2	10ES1L14	24'-11 1/2"
E-3	10ES1L14	24'-11 1/2"
CB-4	HW-374	30'-8 3/4"
CB-5	HW-373	30'-1 3/4"



ROOF FRAMING PLAN

ROOF SHEETING
PANELS: 26 Ga. PR - Galvalume +

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ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
A	APPROVAL/PERMIT	02.16.12	RAJ	RAJ	NANG
O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG
RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG

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	CUSTOMER		COOPER BEARINGS	
	END USER		POWER RAIL DIST/COOPER BEARING	
	END USE		MANUFACTURING	
	LOCATION		LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971	
	DRN. BY:	DATE:	ENG. BY:	DATE:
	RAJ	2/16/12	NANG	2/16/12
	JOB NO.:	SCALE:	DWG. NO.:	ISSUE:
	52834	N.T.S.	9 OF 11	RC

EAVE DETAILS WITH SHEETED SIDEWALL
*NOTE: TRIM PROFILE MAY VARY

TRIM_13

RAKE TRIM DETAIL

TRIM_23

SECTION AT CORNER ("R" PANEL)

TRIM_25

FRAMED OPENING JAMB TRIM DETAILS

TRIM_30

FRAMED OPENING HEAD AND SILL DETAILS

TRIM_31

"PBR" ROOF FIXED RIDGE DETAIL
Trim_80

TRIM_106

TRIM_150

TRIM_150

U2 BOLTS FOR RIGID FRAME RAFTER AT BUILDING PEAK

U3 BOLTS FOR RIGID FRAME RAFTER TO COLUMN CONNECTION

Fastener Location for Panel At Wall

Fastener Location for "PBR" Roof Panel

SCREW_174

SCREW_175

1

TYPICAL SAG STRAP DETAIL
(BRACED AT BOTTOM ONLY)

NOTE:
MAXIMUM SPACING OF PURLIN IS @ 5'-0" O.C.

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	O	CONSTRUCTION	02.28.12	TSP	RAJ	NANG
	RC	REV. CONSTRUCTION	05.16.12	TSP	RAJ	NANG

5889 S. Greenwood Plaza Blvd, Ste#320 Greenwood Village, Colorado 80111 PHONE: 800-345-4610 www.armstrongsteel.com	DESCRIPTION	DETAIL DRAWINGS
CUSTOMER END USER END USE LOCATION	COOPER BEARINGS	
	POWER RAIL DIST/COOPER BEARING	
	MANUFACTURING	
	LOT 25A - 2169 BALTIMORE AVE, GEORGETOWN, DE 19971	

DRN. BY: RAJ	DATE: 2/16/12	ENG. BY: NANG	DATE: 2/16/12
JOB NO.: 52834	SCALE: N.T.S.	DWG. NO.: 11 OF 11	ISSUE: RC