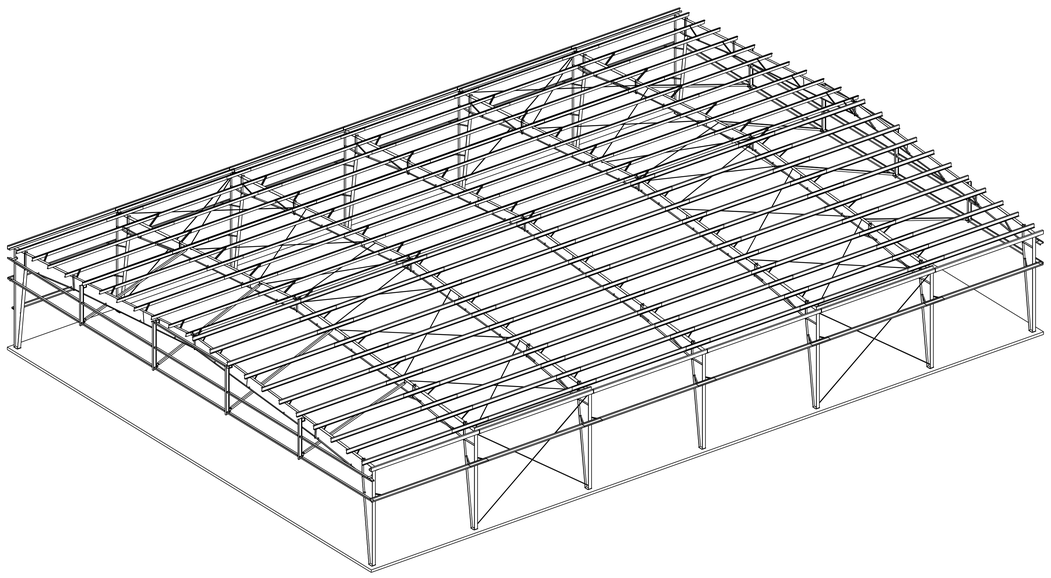
Building Information

Building Width:	105'-0	Front Eave Ht.:	20'-0
Building Length:	147'-6	Back Eave Ht.:	20'-0
Roof Panel Type:	26 Ga. R-Panel	Roof Color:	GALVALUME PLUS
Wall Panel Type:	26 Ga. R-Panel	Wall Color:	TBD
Roof Trim Color:	TBD	Wall Trim Color:	TBD



Material Specifications

1. Primary Framing:
Web Plates, ASTM A529, A572, A1011, Grade 55
Flanges, ASTM A529, A572, Grade 55

2. Secondary Framing:
Galvanized 16Ga, 15Ga. 14Ga, 13Ga, 12Ga, ASTM A653 G90, Grade 55, Min. Yield 55 ksi.

3. Roof & Wall Covering:
26Ga Painted and Unpainted ZA., ASTM A792 AZ50, Grade 50 & 80
24Ga Painted and Unpainted ZA., ASTM A792 AZ50, Grade 50
26Ga Painted Galvanized, ASTM A653 G90, AZ55 Grade 50 & 80
24Ga Painted Galvanized, ASTM A653 G90, AZ55 Grade 50

4. Bracing:
Cables, ASTM A475 Extra High Strength Grade.
Angles, ASTM A36, Min. Yield 36 ksi.
Rods , A529 Grade 50

5. Bracing and Columns:
Pipe, ASTM A53 Grade B, Min. Yield 35 ksi.
Round HSS, ASTM A500 Grade B, Min. Yield 42 ksi.
Rect. HSS, ASTM A500 Grade B, Min. Yield 46 ksi.

6. Bolts:
High Strength Bolts, ASTM A325-N, Washer under turning element. Machine Bolts, ASTM A307.
Anchor Bolts (Not By CBC) Sized Based on A36 Material.

7. Shop Coating:
All Steel members except galvanized secondary framing, cables, bolts and screws shall receive one shop coat.

Product Certifications

1. IAS International Accreditation Services, Inc. Approved Fabricator AC-472, MB-152.

2. City of Los Angeles, CA. Approved Type I Fabricator No. 1436.

3. City of Riverside, CA. Approved Type I Fabricator No. SP07-0091.

4. Clark County, Approved Steel Fabricator No. 404.

Codes & Specifications

The design of this structure is in compliance with the CBC specifications and standards, utilizing the pertinent provisions and recommendations of the following Codes.

1. California Building Code, 2019 Edition (CBC 2019).

2. American Institute of Steel Construction, Fifteenth Edition (AISC 360-16 & AISC 341-16).

3. American Iron and Steel Institute, 2016 Edition (AISI S100-16).

4. Metal Building Manufacturers Association, 2018 Edition (MBMA, 2018).

5. American Welding Society, Structural Welding Code (AWS D1.1, 2015).

Inspections

1. Shop Welding inspection is not required according to the approved status of the above Certifications.
No field welding is required by CBC Steel Buildings. However, if any field welding is required due to any field modifications, special inspection is required.
2. Special inspection is required for high strength bolts. The Turn of the Nut method of tightening is recommended, under the supervision of an independent testing laboratory. Alternate methods of tightening may be used as permitted in the Specification for Structural Joints Using ASTM A325 or A490 Bolts (AISC Fifteenth Edition). CBC Steel Buildings shall not be responsible for administration or costs associated with the inspection process.
3. Special inspections and testing that may be required by governmental or other authority during construction and/or steel fabrication (collectively, "inspections") are not the responsibility of CBC, and to the extent required it shall be the responsibility of the builder and/or owner. In the event the inspections are required, the builder and/or owner shall employ a third-party quality assurance testing agency approved by the relevant authority. If such requirements are not specifically included in CBC sales documents, no inspections by CBC or at any Nucor facility shall be made. All CBC/NBG facilities are accredited by IAS AC472.

Design Loads

This steel building is designed utilizing the following loads, in compliance with the pertinent provisions of the California Building Code, 2019 Edition (CBC 2019).

All accessories such as doors, windows, etc. not by CBC Steel Buildings, must be designed as Structural Components in accordance with the Wind Load provisions of the applicable Codes and Specifications referenced on this page.

The Builder and/or the Engineer of Record must confirm that the following loads meet the requirements of the local building department. CBC Steel Buildings and the undersigned are "NOT the Engineer of Record for the entire project.

Building Dead Load _____ 5.0 psf (Total)
Collateral Load _____ 5.0 psf
Live Load _____ 20 psf
Live Load Reduction Allowed ____ Yes
Snow Load, Roof _____ 0 psf
Snow Load, Ground _____ 0 psf
Ce _____ 1.0
Impt. Factor _____ 1.10

Wind Load, Speed _____ Vult: 110 mph, Vasd: 85 mph
Exposure _____ C
Wind Enclosure _____ Enclosed, GCpi = ±0.18
Impt. Factor _____ 1.0
Kzt _____ 1.0

Earthquake Load
Risk Category: III
Impt. Factor: 1.25
Ss = 53.90% S1 = 24.60%
Sds = 0.49 Sd1 = 0.35
Seismic Site Class: D
Seismic Design Category: D

Equivalent Lateral Force Procedure
Lateral Direction:
Ordinary Moment Frame (OMF)
R = 3.50, Omega = 2.50, V = CsW, Cs = 0.18
Longitudinal Direction:
Ordinary Concentrically Braced Frame (OCBF)
R = 3.25, Omega = 2.00, V = CsW, Cs = 0.19

Other Loads:
Mezzanine:
Live Load _____ N/A
Dead Load _____ N/A
Crane Load _____ N/A

Special Notes

N/A

GLOSSARY OF ABBREVIATIONS

A.B. = Anchor Bolts	H.S.B. = High Strength Bolts	PL. = Plate
B.S. = Both Sides	Ht. = Height	Req'd = Required
B.U. = Built-Up	M.B = Machine bolts	Rev. = Revision
Dia. Diameter	Max. = Maximum	Stiff. = Stiffener
Flg. = Flange	Min. = Minimum	T.B.D. = To Be Determined
F.S. = Far Side	N.S. = Near Side	Typ. = Typical
Ga. = Gauge	O.C. = On Center	U.N.O. = Unless Noted Otherwise

?? = Part Mark to be determined and will be updated on For Construction drawings

Special Bolting Connection Inspection Req. (Made with A325 Bolts)

1) Pre-tensioning of A325 bolts is required on primary framing, bolted bracing, and strut connections if located in seismic performance/ design category "D", "E" or "F".
2) Slip critical connections are not required by CBC Steel Buildings
3) ½" A325 bolts do not require pre-tensioning unless noted.

Drawing Status

☐ Preliminary:
These drawings are conceptual only and are not to be used for the permit or construction process.

☒ For Permit
These drawings are Final and are for review by the building official or others. This set is not intended for construction, as piece markings have not been identified, nor is it intended for the ANCHOR BOLT PLAN to be poured.

☐ For Construction
Erection drawings, identified as "Detailed for Fabrication".

CBC JOB No. C22B0182A
DEALER: R.C. PATTERSON INC.
SHEET 1 OF 11
ENGR. APR. VP
DRAWN JDM
DATE 9/19/2022
SCALE

GENERAL INFORMATION

CUSTOMER: ROB KERTH ICE LAND
LOCATION: SACRAMENTO, CA 95815

PLOT DATES:

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICE/PLANT: 17001 E LOUISE AVE
(209) 983-0900 FAX: (209) 858-2354

IAS ACCREDITED AC472
MBMA METAL BUILDINGS

9/19/22

PAUL ANDERSON C048107 REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

REV	BY	DATE

Detail - A

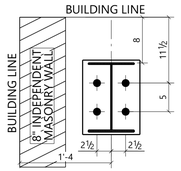


Plate : ⅝" x 10" x 1'-1" W/ 1 ¼" Dia. A.B.'s

Detail - B

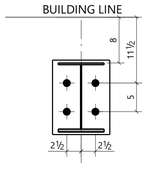


Plate : ⅝" x 10" x 1'-1" W/ 1 ¼" Dia. A.B.'s

Detail - C

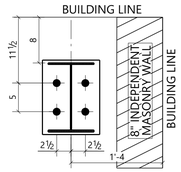


Plate : ⅝" x 10" x 1'-1" W/ 1 ¼" Dia. A.B.'s

Detail - D

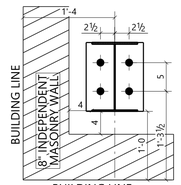


Plate : ⅝" x 10" x 1'-0" W/ 1 ¼" Dia. A.B.'s

Detail - E

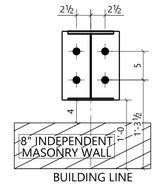


Plate : ⅝" x 10" x 1'-0" W/ 1 ¼" Dia. A.B.'s

Detail - F

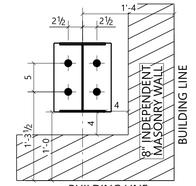
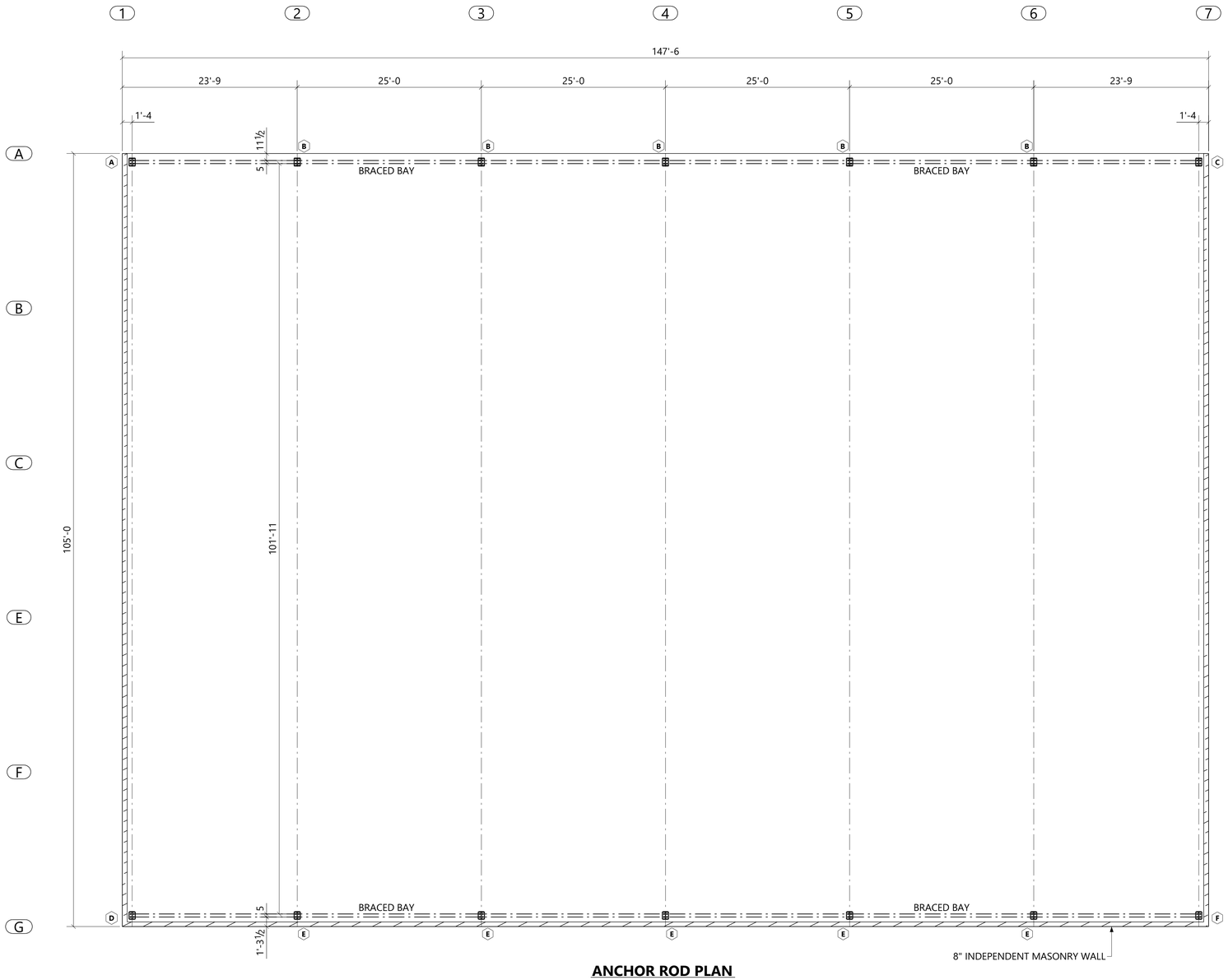


Plate : ⅝" x 10" x 1'-0" W/ 1 ¼" Dia. A.B.'s

SEE CALCS FOR REACTIONS



ANCHOR ROD PLAN

(2) 1 ¼" dia. bolts @ 28 Places See Details

Anchor Rod Plan General Notes:

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE, ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY METAL BUILDING MANUFACTURER.

AN4: THE ANCHOR ROD LOCATIONS PROVIDED BY METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN

AN5: DRAWINGS ARE NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED

AN7: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN8: FINISHED FLOOR ELEVATION = 100'-0" BOTTOM OF BASE PLATE = 100'-0" UNLESS NOTED OTHERWISE

CBC JOB No. C22B0182A

ANCHOR ROD PLAN

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

DEALER: R.C. PATTERSON INC.

SHEET 2 OF 11

ENGR. APR. VP

DRAWN JDM

DATE 9/19/2022

SCALE

PLOT DATES:

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICES/PLANT: 1700 E. LOUISE AVE
(209) 983-0970 FAX (209) 838-2354

IAS ACCREDITED AC472

MBMA METAL BUILDING MANUFACTURERS ASSOCIATION

REGISTERED PROFESSIONAL ENGINEER RAYMOND PAUL ANDERSON C048107 STATE OF CALIFORNIA

9/19/22

REV.	BY	DATE

MATERIAL DESCRIPTION

NOTE: ALL LIGHT Ga. MAT'L. GALVANIZED

GEB- EAVE STRUT 8"x 8"x 16 Ga. "Gee"
GEX- EAVE STRUT 9 1/2"x 8"x 14 Ga. "Gee"
GPB- CORNER POSTS 8"x 8"x 16 Ga. "Gee"
RA-1 RAKE ANGLE 5"x 2" 16 Ga. 55 ksi.
FB- FLANGE BRACE 2"x 2" 16 Ga. 55 ksi.
WA- WINDOW FRAME ANGLE 2"x 2" 16 Ga.
PA- ROOF/WALL SHEETING 26 Ga. "R" PANEL
PB- ROOF/WALL SHEETING 24 Ga. "R" PANEL
RC- RIDGE CAP 26 Ga. "R" PANEL
RD- RIDGE CAP 24 Ga. "R" PANEL
PH- WALL SHEETING 26 Ga. REVERSE "R" PANEL
PJ- WALL SHEETING 24 Ga. REVERSE "R" PANEL
PD- WALL SHEETING 26 Ga. "A" PANEL
PE- WALL SHEETING 24 Ga. "A" PANEL
S2P- ROOF SHEETING STANDING SEAM SS-24 PANEL
S3P- ROOF SHEETING STANDING SEAM MS-24 PANEL

H9320 TRANSLUCENT "R" PANEL 3' x 10'-8
H9318 INSULATED TRANSLUCENT "R" PANEL 3' x 10'-8

FC- STRUCTURAL BUILT-UP COLUMNS
FR- STRUCTURAL BUILT-UP RAFTERS
FM- STRUCTURAL BUILT-UP MISCELLANEOUS WALL SUPPORT BEAM & STRUTS
FA- STRUCTURAL ANGLES
FP- STRUCTURAL PIPES
FT- STRUCTURAL TUBES
FJ- 10 GA. PRESS BROKE MEMBERS
MC- STRUCTURAL CHANNELS
SB- SAG BLOCKING 5 1/4"x7/8"x7/8"x16 Ga. "Zee"
RB- RIDGE SAG BLOCKING 5 1/4"x7/8"x7/8"x16 Ga. "Zee"

BC- BRACE CABLE 3/8"Ø
RS- BRACE RODS 5/8"Ø
R6- BRACE RODS 3/4"Ø
R8- BRACE RODS 1"Ø
R10- BRACE RODS 1 1/4"Ø
R12- BRACE RODS 1 1/2"Ø

8" DEEP MEMBER DESCRIPTIONS

ZS- ROOF PURLINS / WALL GIRTS 8"x 2 1/2"x 12 Ga. (0.099) "Zee"
ZX- ROOF PURLINS / WALL GIRTS 8"x 2 1/2"x 13 Ga. (0.089) "Zee"
ZZ- ROOF PURLINS / WALL GIRTS 8"x 2 1/2"x 14 Ga. (0.075) "Zee"
ZT- ROOF PURLINS / WALL GIRTS 8"x 2 1/2"x 15 Ga. (0.067) "Zee"
ZW- ROOF PURLINS / WALL GIRTS 8"x 2 1/2"x 16 Ga. (0.060) "Zee"

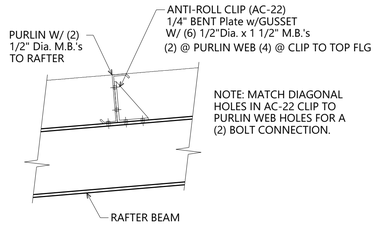
CS- DOOR HEADERS/JAMBS & END POSTS 8"x 2 1/2"x 12 Ga. (0.099) "Cee"
CX- DOOR HEADERS/JAMBS & END POSTS 8"x 2 1/2"x 13Ga. (0.089) "Cee"
CZ- DOOR HEADERS/JAMBS & END POSTS 8"x 2 1/2"x 14 Ga. (0.075) "Cee"
CT- DOOR HEADERS/JAMBS & END POSTS 8"x 2 1/2"x 15 Ga. (0.067) "Cee"
CW- DOOR HEADERS/JAMBS & END POSTS 8"x 2 1/2"x 16 Ga. (0.060) "Cee"
DX- DOUBLE CEE RAKE BEAM (2) 8"x 2 1/2"x 13 Ga. (0.089) "Cee"
US- CAP CHANNEL 8 1/4" x 3" x 12 Ga.
UX- CAP CHANNEL 8 1/4" x 3" x 13 Ga.
UZ- CAP CHANNEL 8 1/4" x 3" x 14 Ga.
UT- CAP CHANNEL 8 1/4" x 3" x 15 Ga.
UW- CAP CHANNEL 8 1/4" x 3" x 16 Ga.
UR- "WRAP" HEADER CHANNEL 8" x 8 1/4" x 4" 14 Ga.

9 1/2" DEEP MEMBER DESCRIPTIONS

ZY- ROOF PURLINS / WALL GIRTS 9 1/2"x 3"x 12 Ga. (0.099) "Zee"
ZU- ROOF PURLINS / WALL GIRTS 9 1/2"x 3"x 13 Ga. (0.089) "Zee"
ZI- ROOF PURLINS / WALL GIRTS 9 1/2"x 3"x 14 Ga. (0.075) "Zee"
ZO- ROOF PURLINS / WALL GIRTS 9 1/2"x 3"x 15 Ga. (0.067) "Zee"

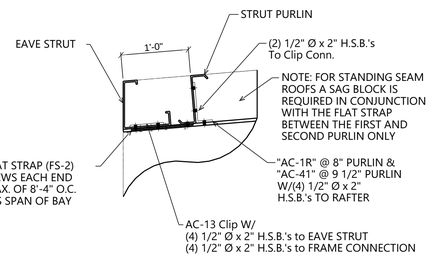
CC- DOOR HEADERS/JAMBS & END POSTS 9 1/2"x 2 1/2"x 12 Ga. (0.099) "Cee"
CR- DOOR HEADERS/JAMBS & END POSTS 9 1/2"x 2 1/2"x 15 Ga. (0.067) "Cee"

UY- CAP CHANNEL 9 3/4" x 3" x 12 Ga.
UU- CAP CHANNEL 9 3/4" x 3" x 13 Ga.
UI- CAP CHANNEL 9 3/4" x 3" x 14 Ga.
UO- CAP CHANNEL 9 3/4" x 3" x 15 Ga.



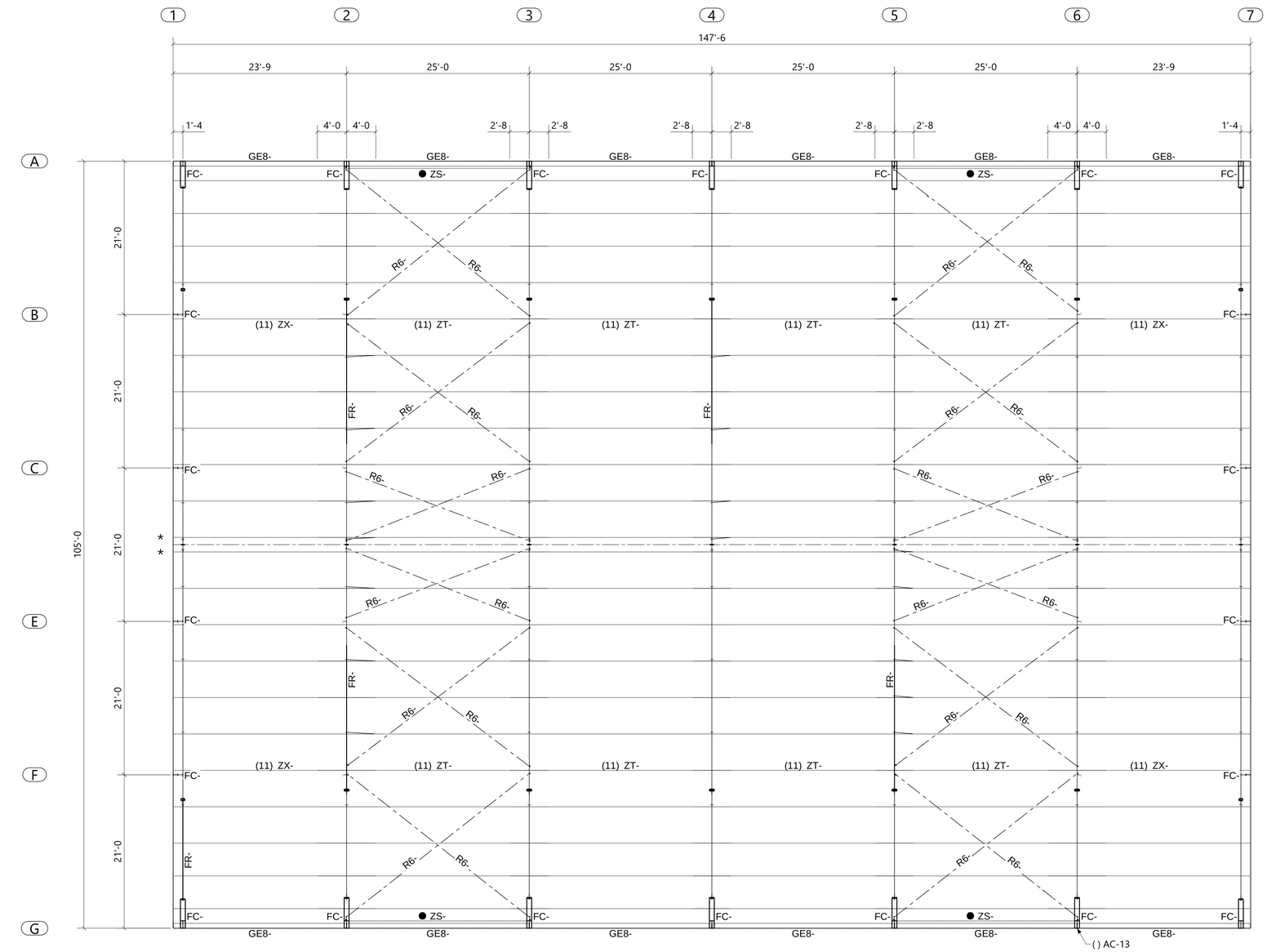
ANTI-ROLL CLIP DETAIL

★ - DENOTES CLIP DETAIL @ PURLIN RUN SHOWN



EAVE STRUT PURLIN DETAIL

● - DENOTES CLIP DETAIL @ PURLIN RUN SHOWN



ROOF FRAMING PLAN

CBC JOB No. C22B0182A

PLOT DATES:

ROOF PLAN

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

DEALER: R.C. PATTERSON INC.

SHEET 3 OF 11

ENGR. APR. VP

DRAWN JDM

DATE 9/19/2022

SCALE

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICES/PLANT: 1700 E LOUISE AVE
(209) 983-0900 FAX: (209) 858-2354

IAS ACCREDITED AC-472

MBMA METAL BUILDING MANUFACTURERS ASSOCIATION

REGISTERED PROFESSIONAL ENGINEER PAUL ANDERSON RAYMOND CA048107 STATE OF CALIFORNIA

9/19/22

REV	BY	DATE

ROOF SHEETING PLAN

PANEL: 26Ga 'R' COLOR : GALVALUME PLUS (GM)

PLOT DATES:

ROOF SHEETING PLAN

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

CBC JOB No. C22B0182A

DEALER: R.C. PATTERSON INC.

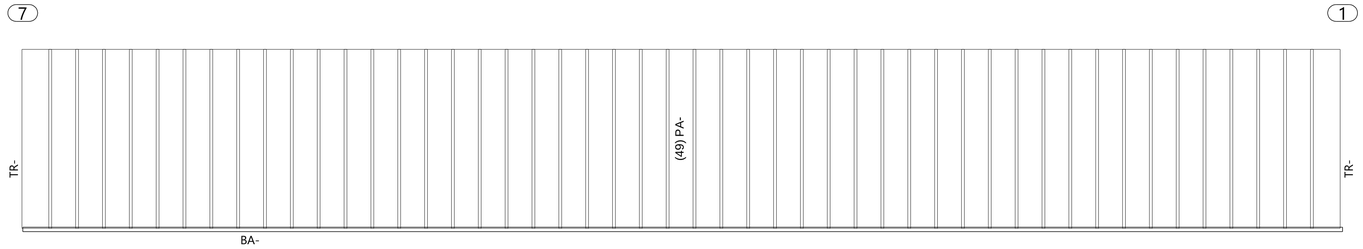
SCALE	DATE	DRAWN	ENGR. APR.	SHEET	OF
	9/19/2022	JDM	VP	4	11

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICES/PLANT: 1700 E. LOUISE AVE
(209) 983-0970 FAX (209) 838-2354

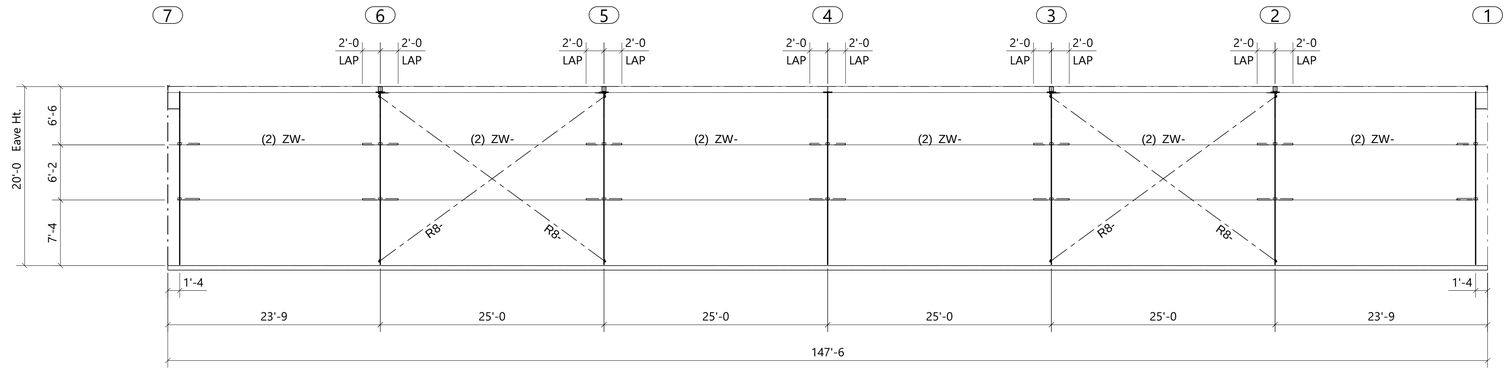
9/19/22

REGISTERED PROFESSIONAL ENGINEER RAYMOND PAUL ANDERSON C048107 STATE OF CALIFORNIA

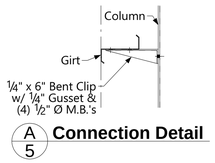
REV.	BY	DATE



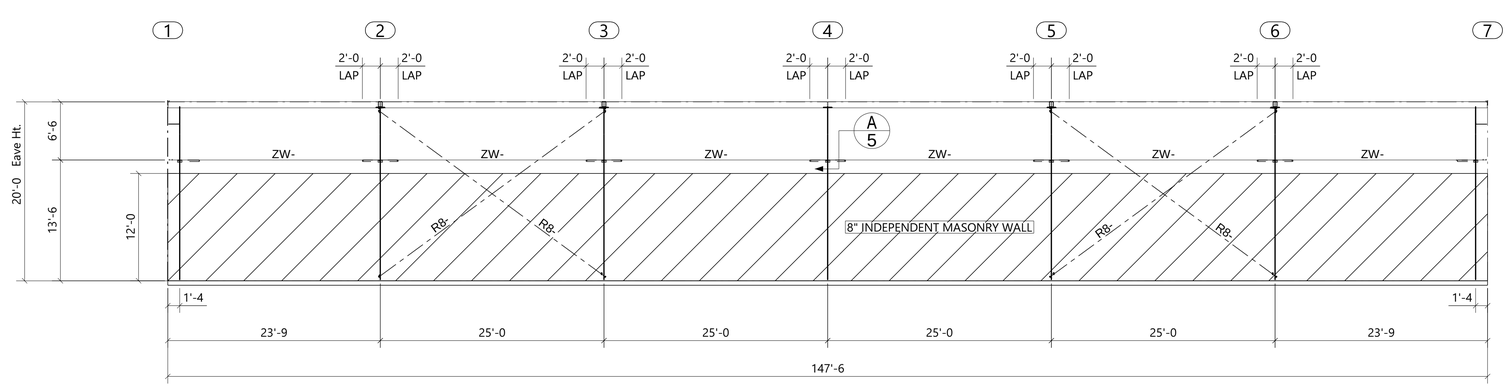
SIDEWALL SHEETING AT LINE A
PANEL: 26Ga 'R' COLOR : TBD



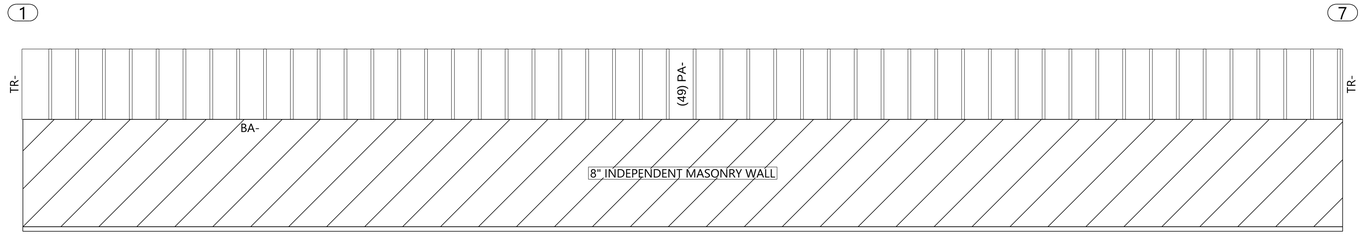
SIDEWALL ELEVATION AT LINE A



A/5 **Connection Detail**



SIDEWALL ELEVATION AT LINE E



SIDEWALL SHEETING AT LINE G
PANEL: 26Ga 'R' COLOR : TBD

CBC JOB No. C22B0182A
DEALER: R.C. PATTERSON INC.
SHEET 5 OF 11
ENGR. APR. VP
DRAWN JDM
DATE 9/19/2022
SCALE

SIDEWALL ELEVATIONS
CUSTOMER: ROB KERTH ICE LAND
LOCATION: SACRAMENTO, CA 95815

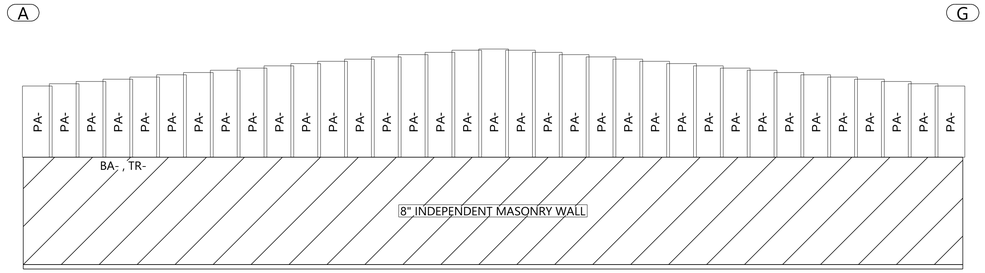
PLOT DATES:

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICE/PLANT: 17700 E. LOUISE AVE
(209) 983-0970 FAX (209) 858-2354

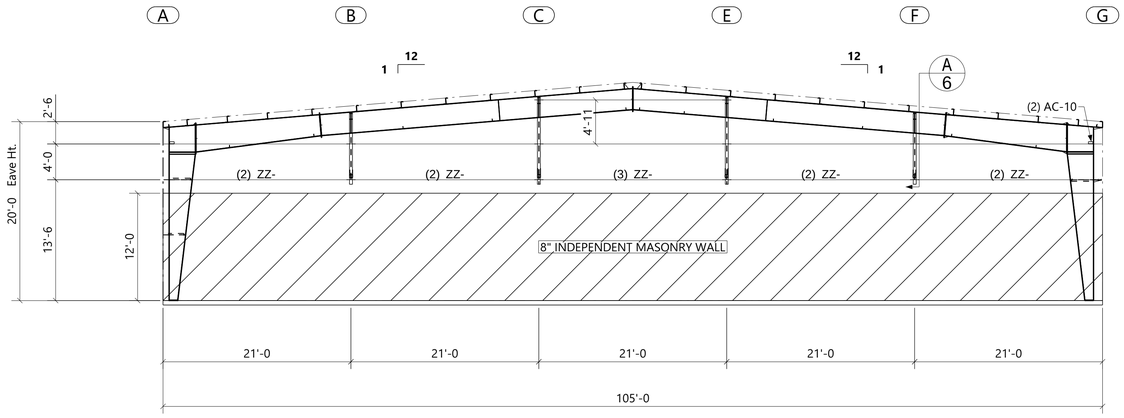
IAS ACCREDITED MBMA METAL BUILDING MANUFACTURERS ASSOCIATION

9/19/22
REGISTERED PROFESSIONAL ENGINEER PAUL ANDERSON RAYMOND C048107 CIVIL STATE OF CALIFORNIA

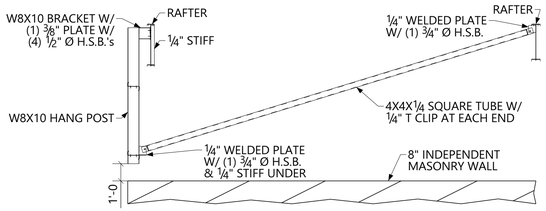
REV	BY	DATE



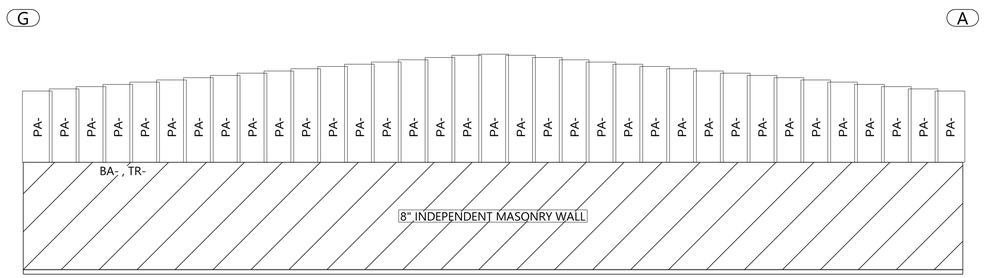
ENDWALL SHEETING AT LINE 1
PANEL: 26Ga 'R' COLOR : TBD



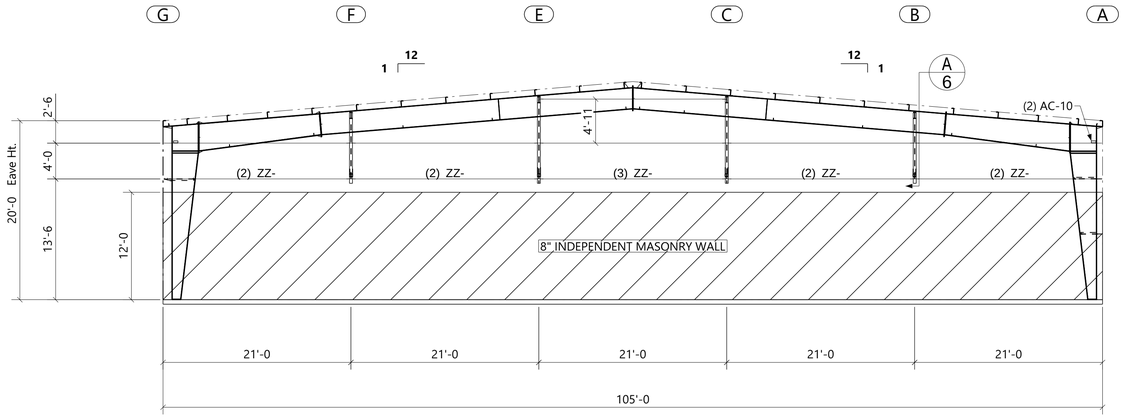
ENDWALL ELEVATION AT LINE 1
HANG POSTS: W8X10



A/6 **Hang Post and Kicker Detail**



ENDWALL SHEETING AT LINE 7
PANEL: 26Ga 'R' COLOR : TBD



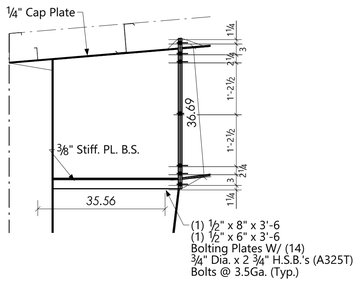
ENDWALL ELEVATION AT LINE 7
HANG POSTS: W8X10

CBC JOB No. C22B0182A
DEALER: R.C. PATTERSON INC.
CUSTOMER: ROB KERTH ICE LAND
LOCATION: SACRAMENTO, CA 95815
ENDWALL ELEVATIONS
SHEET 6 OF 11
ENGR. APR. VP
DRAWN JDM
DATE 9/19/2022
SCALE
PLOT DATES:

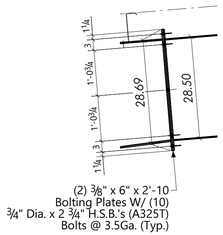
CBC STEEL BUILDINGS A NUCOR Company
P.O. BOX 1009 LATHROP, CA 95330
OFFICES/PLANT 17700 E. LOUISE AVE
(209) 983-0970 FAX (209) 838-2354

PROFESSIONAL ENGINEER REGISTERED PAUL ANDERSON RAYMOND C048107 STATE OF CALIFORNIA
9/19/22

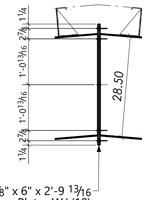
DATE BY REV.



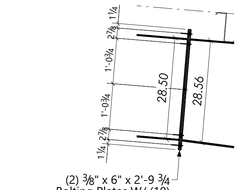
A/7 **Connection Detail**



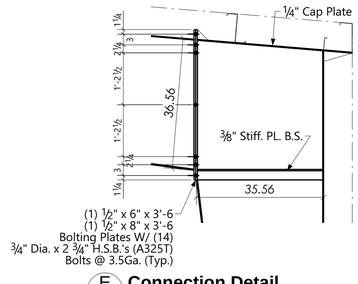
B/7 **Connection Detail**



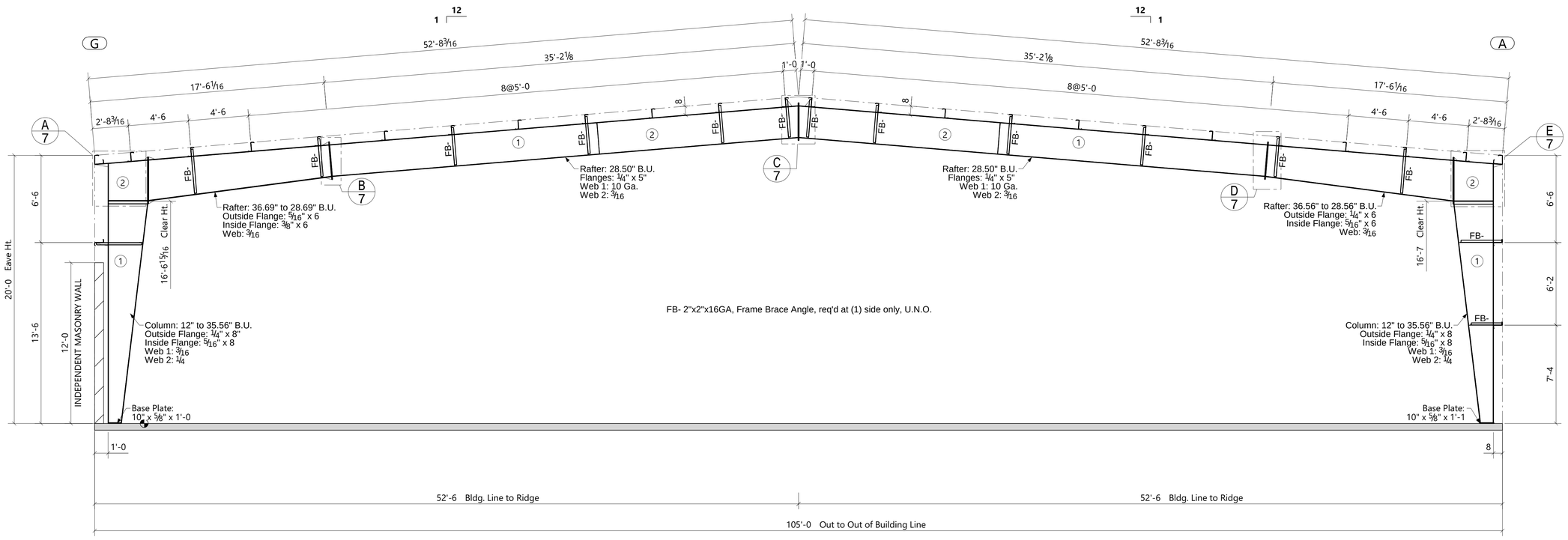
C/7 **Connection Detail**



D/7 **Connection Detail**



E/7 **Connection Detail**



CROSS SECTION AT LINE 1 & 7

PLOT DATES:

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

CBC JOB No. C22B0182A

DEALER: R.C. PATTERSON INC.

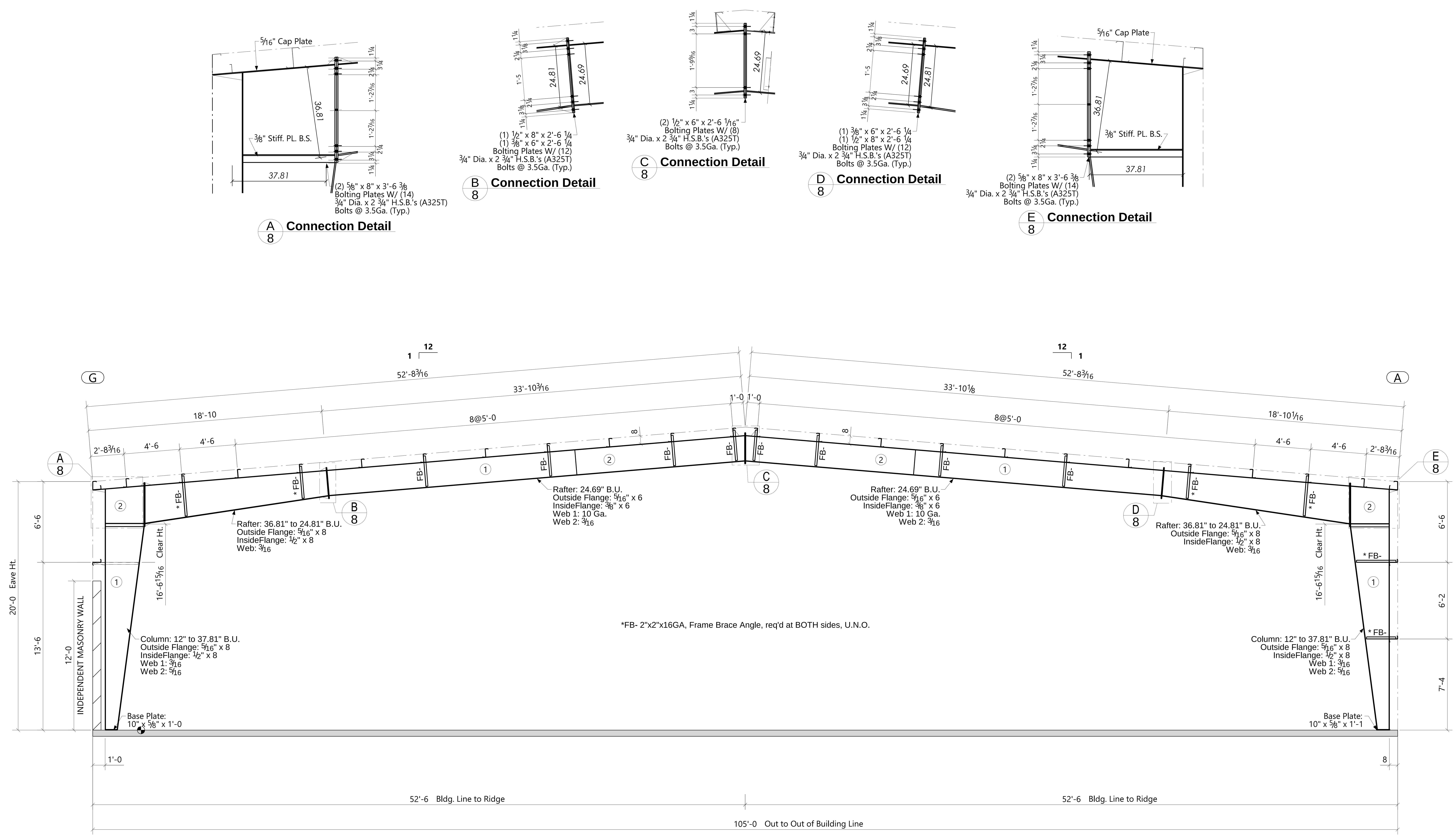
SCALE	DATE	DRAWN	ENGR. APR.	SHEET	OF
	9/19/2022	JDM	VP	7	11

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICES/PLANT 17700 E. LOUISE AVE
(209) 983-0950 FAX (209) 858-2354

9/19/22

PAUL ANDERSON — C048107 — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — CIVIL

REV	BY	DATE



CROSS SECTION AT LINES 2-6

CBC JOB No. C22B0182A

DEALER: R.C. PATTERSON INC.

SHEET 8 OF 11

ENGR. APPR. VP

DRAWN JDM

DATE 9/19/2022

SCALE

CROSS SECTION AT LINES 2-6

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

PLOT DATES:

CBC STEEL BUILDINGS A NUCOR Company

P.O. BOX 1009, LATHROP, CA 95330
OFFICE/PLANT 700 E. LOUISE AVE
(209) 983-0910 FAX (209) 858-2354

IAS ACCREDITED

MBMA MEMBER

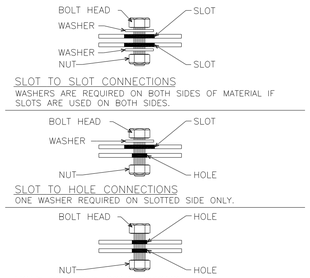
PAUL RAYMOND ANDERSON C48107 CIVIL

9/19/22

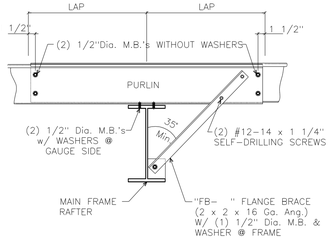
REV. BY DATE

1 TYPICAL WASHER REQUIREMENTS

TYPICAL MACHINE BOLT WASHER REQUIREMENTS
(UNLESS NOTED OTHERWISE ON DRAWINGS)
WASHERS ARE NOT REQUIRED AT PURLIN-GIRT LAP BOLTS!

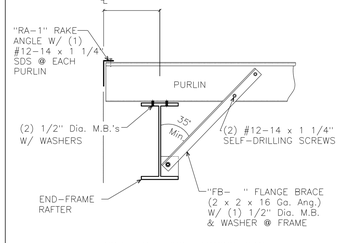


2 CONTINUOUS PURLINS



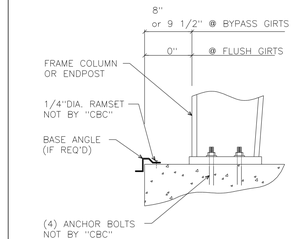
NOTE: SEE ROOF FRAMING PLAN OR CROSS SECTION FOR FLANGE BRACE LOCATIONS

3 END FRAME PURLINS



NOTE: SEE ROOF FRAMING PLAN OR CROSS SECTION FOR FLANGE BRACE LOCATIONS

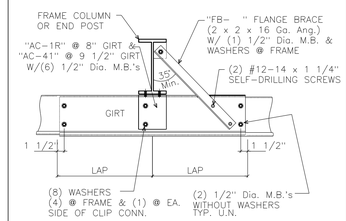
4 (4) BOLT BASE DETAIL



NOTE: DESIGN OF ANCHORAGE IS NOT BY "CBC"

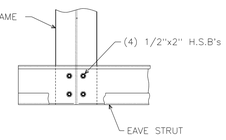
NOTE: SEE ANCHOR BOLT PLAN FOR DIAMETER, GAGE, AND LOCATION OF ANCHOR BOLTS

5 CONTINUOUS GIRTS

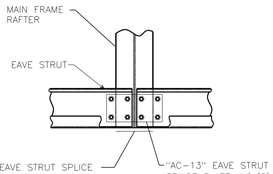


NOTE: SEE WALL FRAMING PLAN OR CROSS SECTION FOR FLANGE BRACE LOCATIONS

6 EAVE STRUT CONN. END

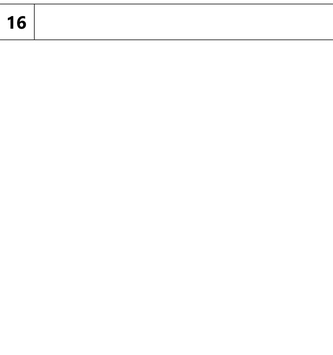


7 EAVE STRUT SPLICE PL



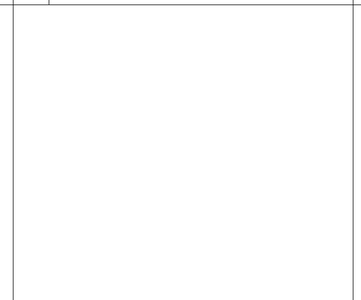
8 COPED "ZEE" GIRT

9 GIRT/ RAFTER BEAM

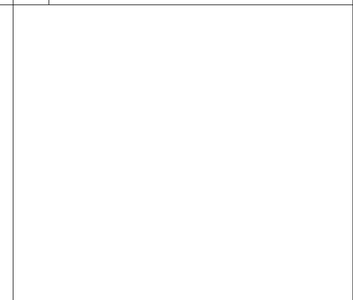


10 EW INSET GIRTS

11 3/4" ROD BRACING



12 1" ROD BRACING



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CBC JOB No. C22B0182A
DEALER: R.C. PATTERSON INC.
SHEET 9 OF 11
ENGR. APR. VP
DRAWN JDM
DATE 9/19/2022
SCALE

GENERAL DETAILS

CUSTOMER: ROB KERTH ICE LAND
LOCATION: SACRAMENTO, CA 95815

PLOT DATES:

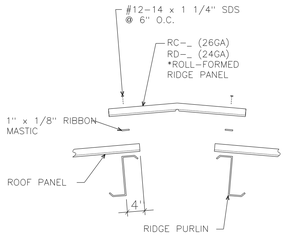
CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICES/PLANT: 1700 E. LOUISE AVE
(209) 983-0970 FAX (209) 838-2354

IAS ACCREDITED
MBMA METAL BUILDINGS

REGISTERED PROFESSIONAL ENGINEER RAYMOND PAUL ANDERSON C048107 STATE OF CALIFORNIA
9/19/22

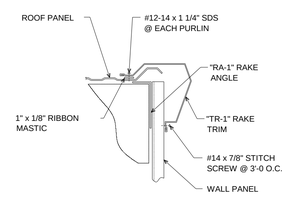
REV.	BY	DATE

1 RIDGE CAP

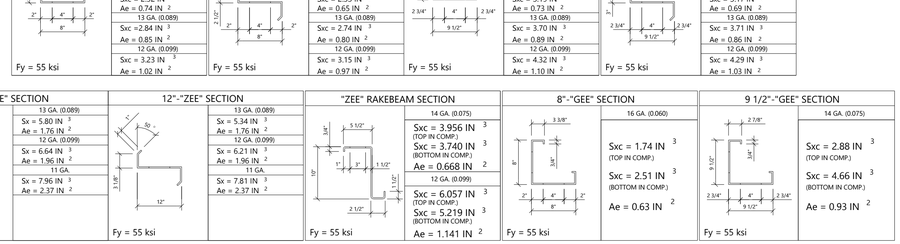


*APPLY AT ROOF PITCH
UP TO 4.5:12

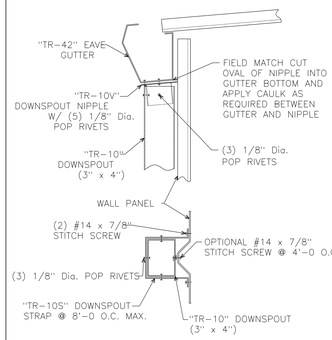
2 RAKE TRIM



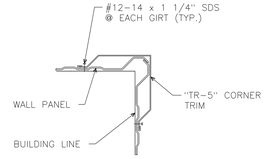
3 STRUCTURAL PROPERTIES

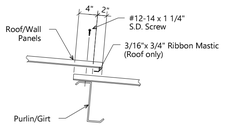


6 DOWNSPOUT

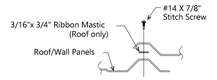


7 CORNER TRIM

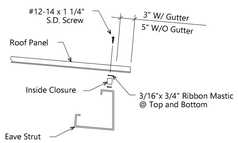




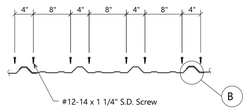
A END LAP DETAIL



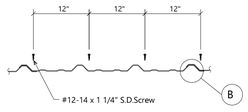
B SIDE LAP DETAIL



C EAVE DETAIL

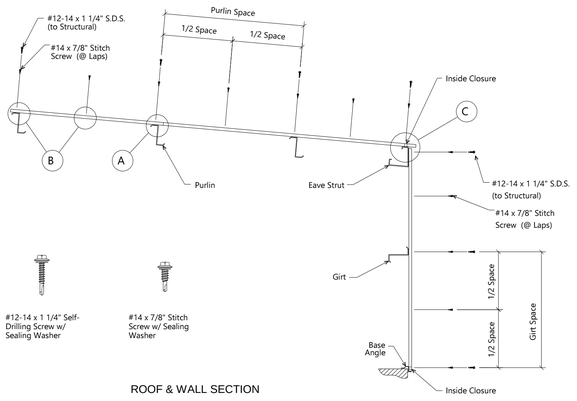


Fastener Spacing @ Ridge Purlin, End Laps,
Eave Strut, & Base Angle

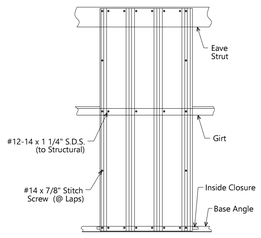


Fastener Spacing @ Intermediate
Purlins & Girts

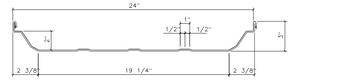
ALL STANDARD FLASHING LAPS,
INCLUDING GUTTERS, ARE 3"



ROOF & WALL SECTION



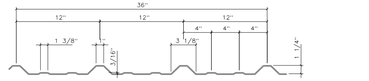
WALL ELEVATION



SS24 / MS24 PANEL PROPERTIES

GAGE	Fy	Design Thickness	Weight (P.S.F.)	TOP IN COMPRESSION Ix (in4/ ft.)	TOP IN COMPRESSION Sx (in3/ ft.)	BOTTOM IN COMPRESSION Ix (in4/ ft.)	BOTTOM IN COMPRESSION Sx (in3/ ft.)
24	50 ksi	.0225	1.20	0.276	0.111	0.126	0.079
22	50 ksi	.030	1.58	0.371	0.152	0.177	0.108

ROOF PANELS

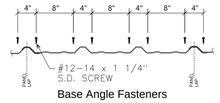


R PANEL PROPERTIES

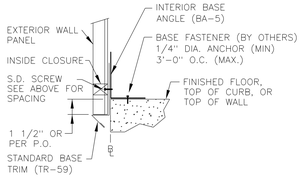
GAGE	Fy	Design Thickness	Weight (P.S.F.)	TOP IN COMPRESSION Ix	TOP IN COMPRESSION Sx	BOTTOM IN COMPRESSION Ix	BOTTOM IN COMPRESSION Sx
26	80 ksi	.0177	0.97	0.0393	0.0398	0.032	0.0463
24	50 ksi	.0225	1.18	0.0567	0.0589	0.044	0.060

WALL PANELS

11 SHEETING PROPERTIES

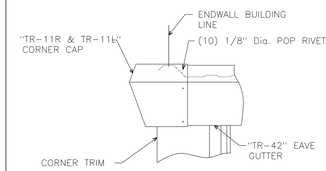


Base Angle Fasteners

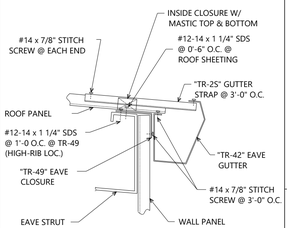


NOTE: THE DESIGN OR ATTACHMENT OF
THE BASE ANGLE IS NOT BY CBC.

13 CORNER CAP / GUTTER



14 EAVE GUTTER



15 FASTENER PLACEMENT

18 3x4 BASE ANGLE W/ TRIM

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CBC JOB No. C22B0182A

DEALER: R.C. PATTERSON INC.

SHEET 10 OF 11

ENGR. APR. VP

DRAWN JDM

DATE 9/19/2022

SCALE

GENERAL DETAILS

CUSTOMER: ROB KERTH ICE LAND

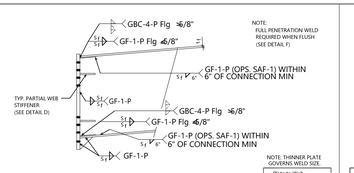
LOCATION: SACRAMENTO, CA 95815

PLOT DATES:

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009, LATHROP, CA 95330
OFFICE/PLANT: 17700 E LOUISE AVE
(209) 983-0970 FAX (209) 858-2354

PROFESSIONAL ENGINEER
PAUL ANDERSON
C048107
REGISTERED
RAYMOND
STATE OF CALIFORNIA
CIVIL
9/19/22

REV	BY	DATE

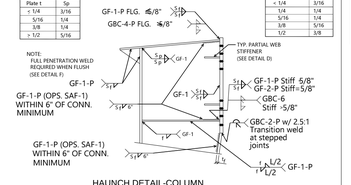


HAUNCH DETAIL-RAFTER

Plate t	Sp
< 1/4	3/16
5/16	1/4
3/8	1/4
> 1/2	5/16

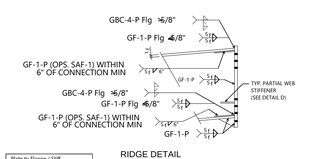
Plate to Web	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	3/8

NOTE: THINNER PLATE GOVERNS WELD SIZE.



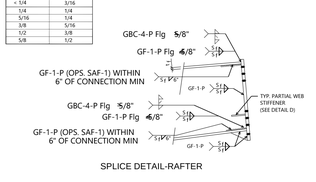
HAUNCH DETAIL-COLUMN

A WELDING ENGINEERING STANDARDS



RIDGE DETAIL

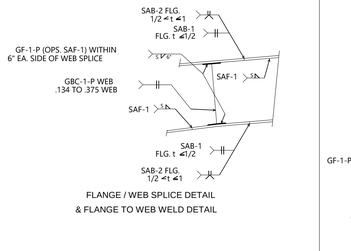
Plate to Flange / Stiff	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	3/8
5/8	1/2



SPLICE DETAIL-RAFTER

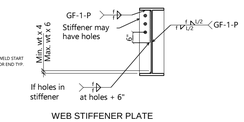
B WELDING ENGINEERING STANDARDS

Flange to web fillet size "S"		Flange t			
		< 1/4	> 1/2	< 3/4	> 3/4
Web t	< 9 Ga	1/8	3/16	3/16	3/16
	9 Ga < t < 1/4	3/16	3/16	3/16	3/16
	1/4	3/16	3/16	1/4	1/4
	1/4 < t ≤1/2	N/A	3/16	1/4	5/16
	>1/2	N/A	5/16	5/16	5/16



FLANGE / WEB SPLICE DETAIL
& FLANGE TO WEB WELD DETAIL

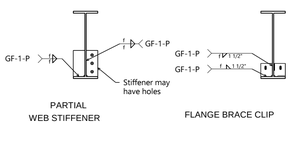
C WELDING ENGINEERING STANDARDS



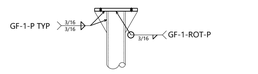
WEB STIFFENER PLATE

Stiffener to flange	
Stiffener t	f
<0.25 (1/4)	3/16
0.3125 (5/16)	1/4
0.375 (3/8)	1/4
0.500 (1/2)	5/16

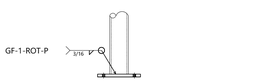
Stiffener to web	
Web t	f
< 1/4	3/16
1/4	1/4
5/16 to 1/2	5/16



D WELDING ENGINEERING STANDARDS

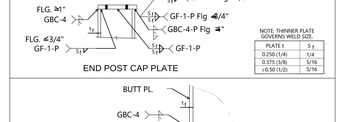


PIPE COLUMN CAP DETAIL



PIPE COLUMN BASE DETAIL

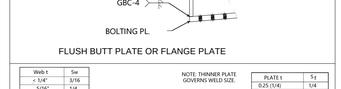
E WELDING ENGINEERING STANDARDS



END POST CAP PLATE

PLATE t	S f
0.250 (1/4)	1/4
0.375 (3/8)	5/16
>0.50 (1/2)	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.

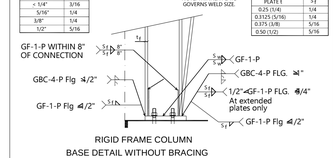


FLUSH BUTT PLATE OR FLANGE PLATE

Web t	Sw
< 1/4"	3/16
5/16"	1/4
3/8"	1/4
1/2"	5/16

PLATE t	S f
0.25 (1/4)	1/4
0.3125 (5/16)	1/4
0.375 (3/8)	5/16
0.50 (1/2)	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.



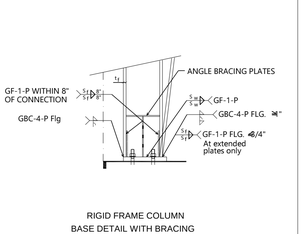
RIGID FRAME COLUMN
BASE DETAIL WITHOUT BRACING

F WELDING ENGINEERING STANDARDS

Web t	Sw
< 1/4"	3/16
5/16"	1/4
3/8"	1/4
1/2"	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.

PLATE t	S f
0.25 (1/4)	1/4
0.3125 (5/16)	1/4
0.375 (3/8)	5/16
0.50 (1/2)	5/16



RIGID FRAME COLUMN
BASE DETAIL WITH BRACING

G WELDING ENGINEERING STANDARDS

UNDERHUNG CRANE BRACKET

NOTE: THINNER PLATE GOVERNS WELD SIZE.	
PLATE t	S f
<0.25 (1/4)	3/16
0.25 (1/4)	1/4
0.375 (3/8)	5/16
0.500 (1/2)	5/16

Stiffener t	f
<0.25 (1/4)	3/16
0.375 (3/8)	1/4
0.500 (1/2)	5/16

CRANE BRACKET DETAIL

H WELDING ENGINEERING STANDARDS

CARRIER & UNIBEAM OUTSIDE BEND

HAMMER HEAD RAFTER INSIDE BEND

J WELDING ENGINEERING STANDARDS

Plate to Flange / Stiff	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	3/8

Plate to Web	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.

ROD SLOT BACK-UP PLATE DETAIL

K WELDING ENGINEERING STANDARDS

Plate to Flange / Stiff	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	3/8

Plate to Web	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.

CANOPY / LEAN-TO BRACKET

L WELDING ENGINEERING STANDARDS

GIRT / PURLIN CLIP

M WELDING ENGINEERING STANDARDS

NOTE: THINNER PLATE GOVERNS WELD SIZE.	
Plate to Web	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	5/16

BACK-UP WELD AT FLANGE / WEB HOLES

N WELDING ENGINEERING STANDARDS

E (Effective weld size) = 5/16" (S)

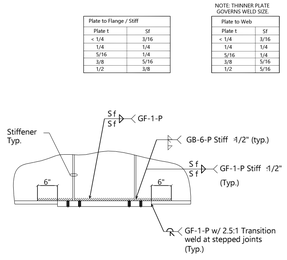
ROD PAD CONNECTION

P WELDING ENGINEERING STANDARDS

Plate to Flange / Stiff	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	3/8
5/8	1/2

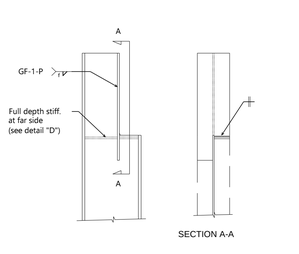
Plate to Web	
Plate t	Sf
< 1/4	3/16
1/4	1/4
5/16	1/4
3/8	5/16
1/2	5/16

NOTE: THINNER PLATE GOVERNS WELD SIZE.



CUT IN PLATE DETAIL

Q WELDING ENGINEERING STANDARDS



SECTION A-A

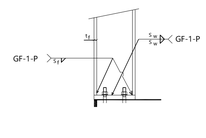
END POST DETAIL

R WELDING ENGINEERING STANDARDS

Web t	Sw
< 1/4"	3/16
5/16"	1/4
3/8"	1/4
1/2"	5/16

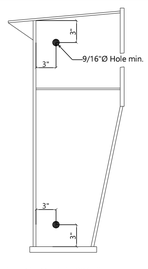
NOTE: THINNER PLATE GOVERNS WELD SIZE.

PLATE t	S f
0.25 (1/4)	1/4
0.3125 (5/16)	1/4
0.375 (3/8)	5/16
0.50 (1/2)	5/16



ENDPOST / SOLDIER / LEAN-TO
COLUMN BASE DETAIL

S WELDING ENGINEERING STANDARDS



SHOP NOTE:
1. All structural parts to have at least two holes, 9/16" dia. minimum, located 3" in from the reference flange, within 1'-0" from each end of the piece. General tolerance on the location can be ; 2" from the reference flange. The location from the top or bottom of the part must be 3" or more from the inside of the plate, as shown above, to avoid stress fractures.

2. If a part already has brace rod slot or other hole located within the tolerance area, a drain hole does not need to be added.

3. A sidewall column is shown, rafter is similar.

T WELDING ENGINEERING STANDARDS

CBC JOB No. C22B0182A

DEALER: R.C. PATTERSON INC.

SHEET 11 OF 11

ENGR. APR. VP

DRAWN JDM

DATE 9/19/2022

SCALE

GENERAL DETAILS

CUSTOMER: ROB KERTH ICE LAND

LOCATION: SACRAMENTO, CA 95815

PLOT DATES:

CBC STEEL BUILDINGS
A NUCOR Company
P.O. BOX 1009 LATHROP, CA 95330
OFFICES/PLANT 1700 E LOUISE AVE
(209) 983-0970 FAX (209) 858-2354

IAS ACCREDITED AC 472

MBMA METAL BUILDINGS

REGISTERED PROFESSIONAL ENGINEER PAUL ANDERSON C048107 STATE OF CALIFORNIA

9/19/22

REV.	BY	DATE