



6800 E. Hampden Ave • Denver, CO 80224 • 800-964-8335 • Fax 701-252-1988

## PERMIT DRAWINGS

NOTE: THESE PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF THIS BUILDING ARE NOT TO BE USED FOR ERECTION PURPOSES. THESE PLANS ARE FOR BUILDING DEPARTMENT PERMIT PURPOSES ONLY. THE ANCHOR BOLT PLAN PORTION IS FOR CONSTRUCTION.

- 1) Manufacturer's standard specifications apply unless stipulated in the contract documents, verification of your purchase order and shown within the approval drawings submitted to you from the manufacturer.
- 2) Manufacturer's design, fabrication quality criteria, standard practices, standard materials including primer coatings, and panel finish shall govern the specifications with any other interpretations to the contrary not withstanding. It is understood by all parties that the Project Consultant/End Use Final Owner is responsible for clarification of inclusions or exclusions from specifications and/or architectural plans.
- 3) In case of discrepancies between manufacturer's plans and other trades including but not limited to foundation and architechtrual plans; manufacturers' plans will govern. (Section 3. AISC Codes of Standard Practices March 2000.)
- 4) Approval of manufacturers' drawings and calculations constitutes acceptance of manufacturer's interpretations, assumptions of design loads and contract documents. (Section 4. AISC Code of standard Practices March 2000.)
- 5) The Project Consultant/End Use Final Owner is responsible for overall project coordination. This includes all interface, compatibility and design considerations covering any materials not supplied or manufactured by Sunward Corporation. This is the ultimate responsibility of the Project Consultant / End Use Final Owner.
- 6) These drawings are subject to the terms of the manufacturer's Engineer's Letter of Certification. Adequacy of the design loads for the area is the responsibility of the Project Consultant/Final Owner. Drawings are sealed only to certify that the structural components to be furnished meet the design loads requested and listed in the Engineer Letter of Certification.
- 7) It is recommended that a qualified Registered Professional Engineer design the foundation. The manufacturer is not responsible for concrete design. See section A3 – Foundations, Metal Building Manufacturers Associations Metal Building Systems Manual.
- 8) Notice to the erectors: Normal erection procedures include corrections, which involve time to determine cause, downtime, use of rental or owned equipment, travel and communication with the manufacturer's service department. Normal erection procedures also include moderate amounts of reaming, field welding (if required by design), cutting, shimming, touch-up painting. These items are not subject to claim for back charges.
- 9) Any change or correction not reported prior to the work being performed will not be eligible for reimbursement. At no time shall an erector alter the structural design without prior approval from the manufacturer's design engineer and service department. Acceptance of correction procedures will not imply acceptance of a back charge unless such changes are accepted in writing; including pay rates, proposed man-hours. Downtime, equipment costs, supervision, overhead, profit, liquidated damages and consequential costs expense are not subject to claim.
- 10) The terms of the claim shall be in accordance with Section IV Common Industry Practices. Section 6. Erection and other fieldwork. Specifically, Section 6.10. "Correction of errors and repairs" of the Metal Building Manufactures Associations Metal Building Systems

Manual. For a claim form contact the customer services department of the manufacturer @ (701) 252-7390.

- 11) Claims must include written documentation, photographic documentation that shows detail, (part numbers, work performed) and any other pertinent information of completed work.
- 12) **Warning:** In no case should galvalume zinc steel panels be used in conjunction with lead or copper. Both have harmful corrosive effects on the galvalume zinc panels. Even run off from copper should be avoided.
- 13) **Safety:** It is strongly recommended that a safe working job site is a priority to the workforce. **Warnings:** Heights can be dangerous and all safety equipment that is applicable should be used. The manufacturer is not responsible for the work site safety or erection and has not investigated or recommended the erectors for its products. As such, the manufacturer is held harmless for erection quality, accidents, safety and possible OSHA violations. Find out more about OSHA regulations by visiting [www.osha.gov](http://www.osha.gov).
- 14) A325 Bolt tightening requirement. It is the responsibility of the erector to insure proper bolt tightness. See Bolt Tightening method in Erection Manual and general notes of the drawing.
- 15) Protection of primer. The manufacturer's standard primer applied to the structural components is not intended for exterior use or extended exposure to the elements. To protect the primer (structural components "Red Iron") should be covered so they are not exposed to water prior to erection. Water can cause the components to rust. It is recommended that the primed structural components be protected especially if they are not going to be erected immediately. There is no warranty on primer paint against flaking, peeling, fading or shipping abrasions. Touch-up paint will be provided for primer.
- 16) Insurance: It is recommended by the Manufacturer, and Project Consultant/ Final Owner agrees to maintain adequate coverage to insure against risk of loss from the time risk of loss passes, during unloading, delivery, and storage, through construction and after construction. Project Consultant/Final Owner understands that buildings are vulnerable to wind, water damage, and vandalism, before and during construction, and Project Consultant/Final Owner agrees to indemnify and hold Manufacturer harmless for any such damage or costs arising from same.
- 17) All claims for shortages or goods damaged during shipping must be noted on the Bill of Lading to qualify for repair, replacement or reimbursement.
- 18) Inventory must be performed at time of delivery. If inventory is refused then it shall waive project consultant's right for future claims.
- 19) Dunnage shall remain the property of the trucking company.
- 20) Storage of materials. All materials, especially non-painted galvalume or galvanized panels must be protected. If this material is allowed to get wet or moisture is permitted to form (condensation) between the materials serious deterioration of the finish will occur. For your protection, if these

materials get wet, separate and dry all materials immediately. Metal shavings left on the panel finish will also cause panel finish deterioration.

- 21) The manufacturer's limited warranty does not provide for weather tightness. It is the ultimate responsibility of the erector to install the building materials in a manner that provides weather tightness. If the contractor / final owner / erector feels a condition exists that does not allow for weather tightness then additional materials or sealant can be requested. The proper amount of downspouts is the final owner's responsibility. All closures shall be installed. Especially at low pitch roof valleys, eave overhangs, valley gutters; sealant should be installed top and bottom of the closure. In some cases, metal closures should be considered at optional pricing. To help prevent water backup under the ends of roof panels, gutters, valleys and valley gutter should be kept clear of ice and snow, by installation of heated devices and/or snow jacks that prevent sliding snow, which are not included in the purchase to the manufacturer.
- 22) The project consultant/final owner is the entity, whether an individual or a company, which orders and purchases the appropriate building materials from the manufacturer for resale. The contractor or erector is the entity hired to construct or supervise construction of metal building materials, and any other construction facets of a building project as determined by the contract between the erector or contractor and the party retaining it. Neither the project consultant/final owner, erector, nor contractor are agents, representatives or employees of the manufacturer. The project consultant/final owner, erector or contractor maintain independent businesses over which the manufacturer has no control.

This is the case even when a final owner has contacted the manufacturer or the service center directly and obtained the names of one or more erectors in an area from whom he may purchase the manufacturer's products. The provision of such names is not a recommendation or guarantee of the skill, ability or good business methods of any given erector.

Important notice to bidder for installation of building components

Please be advised when providing a quotation for erection of the material, all accessories to be supplied may not be shown on the permit, approval or erection drawings. Please contact the project consultant/final owner for a complete accessory/option list and/or obtain and compare the manufacturer's verification of the purchase order with the drawings. This includes framed openings and walk-in doors, which in many cases are field located by the erector.

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PROJECT CONSULTANT/FINAL OWNER

RESPONSIBILITIES

05/09



SUNWARD CORPORATION

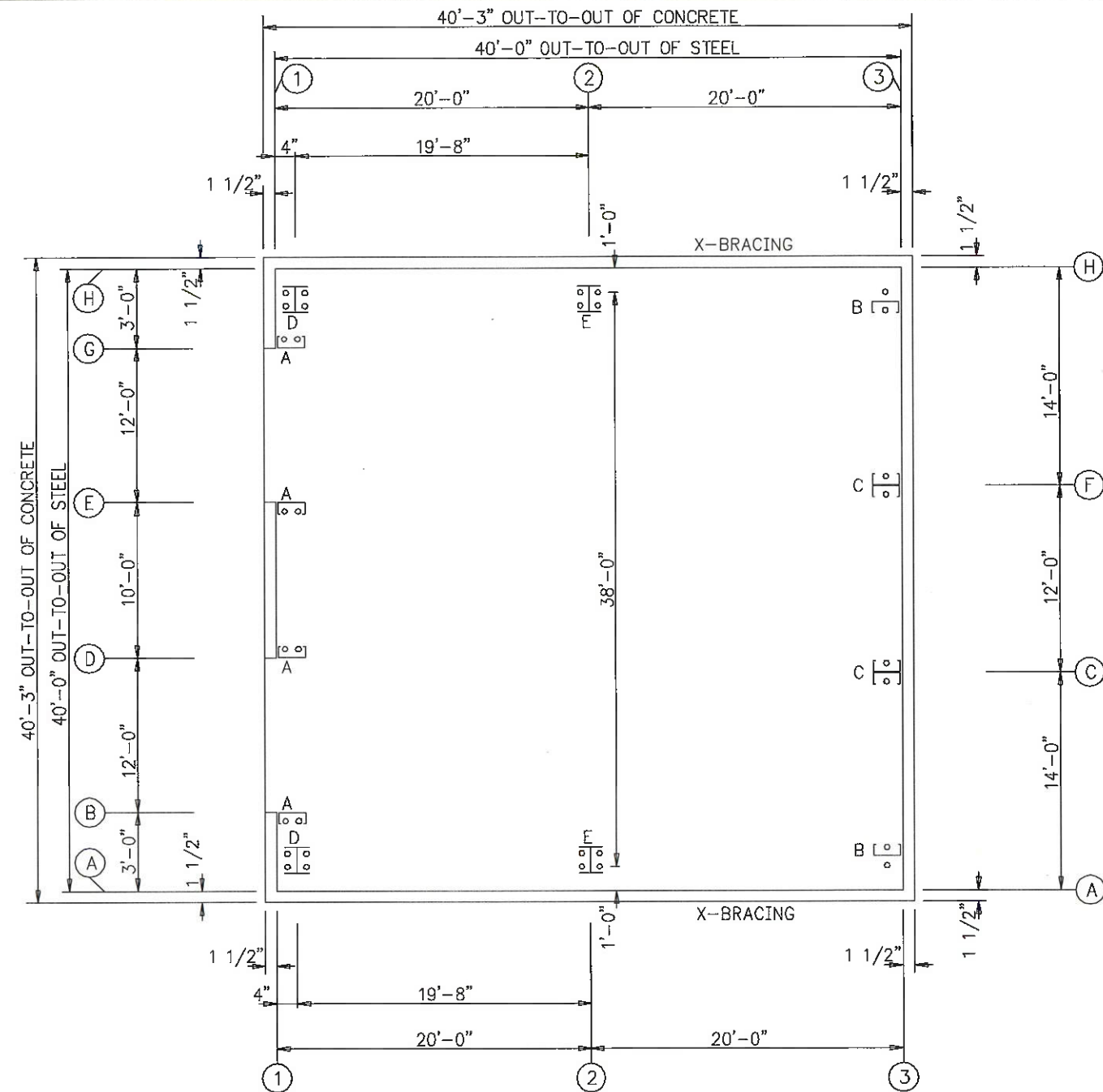
700 13th Ave. SE

P.O. Box 110

Jamestown, ND 58402

(701) 252-7390

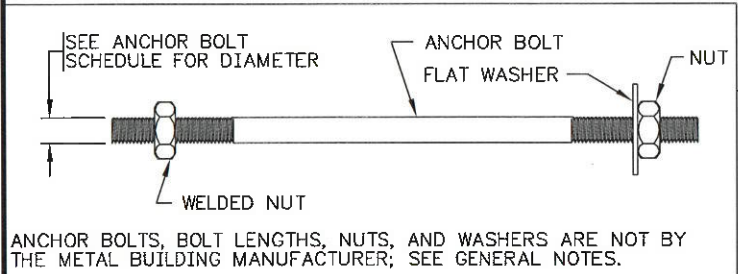
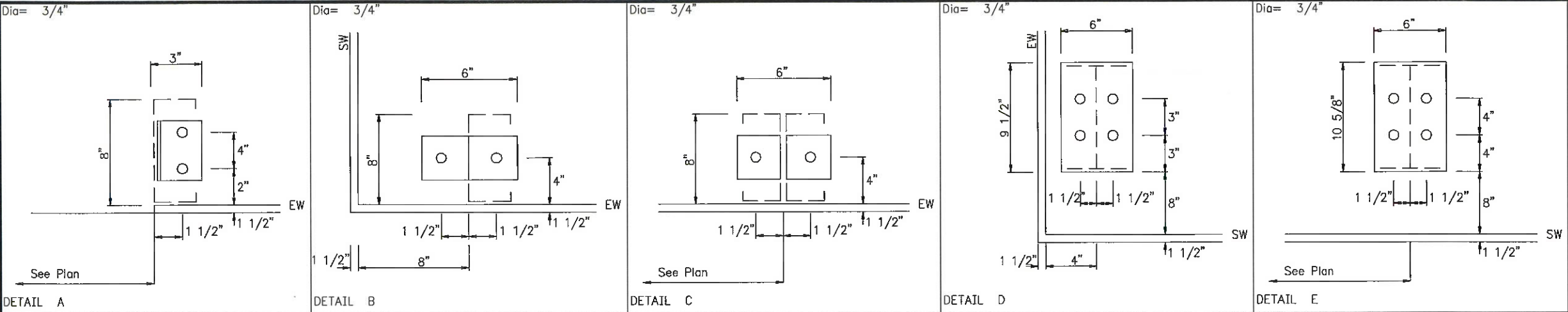
○ Dia= 3/4"



ANCHOR BOLT SETTING PLAN  
NOTE: ALL BASE PLATES AT ELEVATION 100'-0" (UNLESS NOTED)

VERIFY WIDTH AND LENGTH DIMENSIONS		MANUFACTURER (ND FACILITY) IS AN APPROVED FABRICATOR WITH THE FOLLOWING CERTIFICATIONS.			<div>Sunward Steel Buildings</div> <div>BUYER : Marty McMullen CUST. : Marty McMullen SITE : Colorado Springs, CO DESCR.: See Elevations SCALE : NONE P.O. : B33530</div> <div>DRAWN BY: R2C 6/ 9/20 CHECK BY: MK 06/12/20 DES. ENG. : SHEET NO. A1 OF 3</div>
CHECK YOUR ANCHOR BOLT SETTING PLAN TO MAKE CERTAIN THAT ALL THE DIMENSIONS SHOWN AGREE WITH THE DIMENSIONS ON YOUR VERIFICATION. DIMENSIONS SHOWN ON THE VERIFICATION REFER TO STEEL LINES (OUTSIDE FACE OF GIRTS/FRAMING) OF THE BUILDING.		IAS AC472 # MB-216 & MB-104 CSA A660 / CSA W47.1 DIVISION 2 CLARK COUNTY, NV/ # 248, SAN BERNARDINO COUNTY, CA/ # 285 CITY OF HOUSTON, CITY OF SEATTLE CITY OF LOS ANGELES TYPE I FABRICATOR / LWS / HSS / #1015			
SHEETING DESCRIPTION		MANUFACTURER (SC FACILITY) IS AN APPROVED FABRICATOR WITH THE FOLLOWING CERTIFICATIONS.			
ROOF SHEETING: 26 GA. HI-RIB WALL SHEETING: 26 GA. HI-RIB GUTTER & DOWNSPOUT COLOR: KB = Koko Brown TRIM COLOR: KB = Koko Brown		COLOR: KB = Koko Brown COLOR: ST = Saddle Tan			





ANCHOR BOLT SCHEDULE

Qty	Locate	Dia (in)	Type	Proj (in)
16	Endwall	3/4"	Gr36	2.00
16	Frame	3/4"	Gr36	2.00

ANCHOR BOLTS, BOLT LENGTHS, NUTS, AND WASHERS ARE NOT BY THE METAL BUILDING MANUFACTURER; SEE GENERAL NOTES.

SHEETING NOTCH & BOLT PROJECTION

— OMIT NOTCH AT DOOR OPENING(S) AND AS SHOWN ON ANCHOR BOLT SETTING PLAN.

DETAIL X

FIELD LOCATED WALKDOOR DETAIL

DOOR SIZE	3070	4070	6070
R.O. WIDTH	3'-4"	4'-4"	6'-4"
X	3'-7"	4'-7"	6'-7"
Y	3'-1 1/2"	4'-1 1/2"	6'-1 1/2"

— SEE NOTE #3 FOR ANCHOR BOLT REQUIREMENTS.

DETAIL Y

FIELD LOCATED WINDOW DETAIL

— USE THIS DETAIL FOR OTHER FRAMED OPENINGS THAT ARE SET ON CONCRETE.

— SEE NOTE #3 FOR ANCHOR BOLT REQUIREMENTS.

DETAIL Z

WALKDOOR AND WINDOW FRAMED OPENING NOTES

1) SOME DETAILS SHOWN MAY NOT APPLY TO YOUR BUILDING. REFER TO YOUR VERIFICATION FOR THE OPTIONS WHICH ARE INCLUDED.

2) FIELD LOCATE WALKDOOR IN ONE FOOT INCREMENTS STARTING AT STEEL LINE. EXAMPLE: 1'-8 1/2", 2'-8 1/2", 3'-8 1/2", ETC.

3) USE (4) 1/2" x 3 3/4" EXPANDED ANCHORS OR EQUAL PER OPENING, MINIMUM EMBEDMENT 2 1/4". IT IS SUGGESTED TO USE: HILTI KWIK BOLT 3 (KB3) IN COMPLIANCE WITH ICC-ES ESR-2302.

Sunward Steel Buildings

BUYER : Marty McMullen

CUST. : Marty McMullen

SITE : Colorado Springs, CO

DESCR.: See Elevations

SCALE : NONE

P.O. : B33530

DRAWN BY: R2C

CHECK BY: MK

DES. ENG. :

SHEET NO. A2 OF 3

1. ALL COLUMNS SHOWN ON ANCHOR BOLT PLAN CAN NOT BE MOVED. REFER TO FRAMED OPENING DETAILS FOR LOCATING ANY FRAMED OPENINGS NOT SHOWN.
2. THE ANCHOR BOLT SIZES, GAGES, AND SPACING SHOWN ON THE ANCHOR SETTING PLAN ARE FOR CAST IN PLACE ANCHOR RODS UNLESS SPECIALLY NOTED ON THE DRAWING. BOLTS CANNOT BE REPLACED BY EXPANSION OR EPOXY ANCHORS.
3. ANCHOR BOLTS AND ANY OTHER ITEMS EMBEDDED IN CONCRETE, INCLUDING ALL MASONRY FASTENERS AND ANCHORS, ARE NOT BY THE METAL BUILDING MANUFACTURER.
4. FOUNDATION DESIGN OR ANY OTHER CONCRETE DESIGN IS NOT BY THE METAL BUILDING MANUFACTURER (CONSULT A LOCAL REGISTERED PROFESSIONAL ENGINEER FOR THE DESIGN OF FOUNDATION AND CONCRETE WORK).
5. ANCHOR BOLT EMBEDMENT LENGTHS AND REQUIRED CONCRETE EDGE DISTANCES TO BE DETERMINED BY THE FOUNDATION ENGINEER.
6. BASE PLATES ARE DESIGNED ASSUMING CONCRETE HAS A MINIMUM STRENGTH OF 2500 P.S.I. AT 28 DAYS.
7. BASE PLATE SIZES ARE 3" X 8" UNLESS NOTED.
8. ALL REACTIONS ARE GIVEN IN KIPS (1000 LBS.).
9. WALKDOORS, WINDOWS, VENTS, LOUVERS, LIGHT PANELS, LINER, AND KITS ARE TO BE FIELD LOCATED, UNLESS NOTED. REFER TO YOUR VERIFICATION AND ANY REVISIONS FOR THE QUANTITY.
10. REFER TO "GENERAL BUILDING MANUAL" FOR ERECTION GUIDELINES.  
**WARRANTY WILL BE VOID IF NOT INSTALLED PER MANUFACTURER SPECIFICATIONS.**
11. FOR CANADIAN BUILDINGS, SEE "SUPPLEMENT PAGE" FOR ERECTION TOLERANCES.

EXTERIOR ROOF AND WALL PANELS (29, 26 or 24 Gage):  
 TYPE: HI-RIB OR ARCHITECTURAL  
 29 & 26 GAGE PANEL: [SS Grade 80] | 24 GAGE PANEL: [SS Grade 50]  
 NOTE: AS PER SECTION A2.3.2 OF THE | Fu=50 ksi  
 ATSI STANDARD, 2007 EDITION;  
 F<sub>n</sub>=60 ksi (75% OF F<sub>u</sub>=80 ksi).  
 PAINTED: ASTM A792, AZ 50 ALUMINUM/ZINC ALLOY COATED  
 BARE GALVALUME: ASTM A792, AZ 55 ALUMINUM/ZINC ALLOY ACRYLIC COATED

TYPE: HI-RIB OR ARCHITECTURAL [SS Grade 80]  
NOTE: AS PER SECTION A2.3.2 OF THE AISI STANDARD, 2007 ED.;  
F<sub>n</sub>=60 ksi (75% OF F<sub>u</sub>=80 ksi).  
PAINTED: ASTM A653, GALVANIZED G40  
GALVALUME: ASTM A792, AZ55 ALUMINUM/ZINC ALLOY ACRYLIC COATED

ASTM A1011 SS or HSLAS CLASS 1 GRADE 55	PRIMED
ASTM A1011 SS or HSLAS CLASS 1 GRADE 55	GALVANIZED TO ASTM A653 G90

PLATE: ASTM A529 SS GR. 50 or ASTM A572 HSLA TYPE 1 or 2 GR. 50  
SHEET: ASTM A1011 HSLAS CLASS 1 GR. 50  
BAR: ASTM A529 SS GR. 50 or 55 or ASTM A572 HSLA TYPE 1 GR. 50

HOT-ROLLED SECTIONS:      ASTM A36, GRADE 36 (CHANNEL)  
ASTM A992, GRADE 50 (WIDE FLANGE SHAPES)

STRUCTURAL (ROUND) PIPE: ASTM A500B ( $F_y=42$  ksi.)

WASHERS: TYPE 1 ASTM F436 (IF REQUIRED)

ANCHOR BOLTS:  $\frac{1}{2}" \phi = \text{ASTM A307}$

TRIM: (26&24GA.) ASTM A792, SS GRADE 50, AZ 50 ALUMINUM/ZINC ALLOY COATED.

- 1/4"-14 X 7/8" TAE 1 CONFORMS TO SAE J78-98 WITH SEALING WASHER.
- #12-14 X 1 1/4" TEK 2 OR TEK 3 SELF-DRILL SCREW CONFORMS TO SAE J78-98 WITH SEALING WASHER.
- #12-14 X 1 1/2" TEK 2 OR TEK 3 SELF-DRILL SCREW CONFORMS TO SAE J78-98 WITH SEALING WASHER.
- #12-14 X 1 1/4" TEK 5 SELF-DRILL SCREW CONFORMS TO SAE J78-98 WITH SEALING WASHER.
- #17 X 3/4" TYPE AB TAPPING SCREW CONFORMS TO ANSI STANDARD B18.6.4 WITH SEALING WASHER.
- #10 X 1 1/2" WOODGRIP SCREW WITH SEALING WASHER.

HILLISIDE WASHER/BRACER: ASTM A48, CL-30B / ASTM 536-84 GRADE 65  
EYEBOLTS: ASTM A572 GRADE 55 ROD, ZINC COATED ASTM B633 TURNED AND  
WELDED, WITH ASTM A563 GRADE A NUT & ASTM F844 WASHER.

## BRACE GRIPS: SAME REQUIREMENTS AS FHS 7- WIRE CLASS A GALVANIZED

ROD:           ASTM A36

HIGH STRENGTH BOLTS: ASTM A325 (USED WHERE SPECIFIED ON DRAWINGS).

AS23 BOLTS USED ON RIGID FRAME MOMENT CONNECTIONS ARE DESIGNED AS BEARING TYPE CONNECTIONS, AND THREADS ARE INCLUDED IN THE SHEAR PLANE.

MOMENT CONNECTION BOLTS. SPECIAL INSPECTION OF THE TIGHTENING OF THESE

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1. All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
2. Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
3. Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
4. Building reactions are based on the following building data.

Width (ft) = 40  
Length (ft) = 40  
Eave Height (ft) = 14 / 14  
Roof Slope (rise/12) = 3.0:12 / 3.0:12

Building Code	= IBC 18
Local Code (if applicable)	= IBC 18
Risk Category	= II - Normal
Dead Load (psf)	= 2.200
Collateral Load (psf)	= 1
Live Load (psf)	= 20.00
Live Load Reduced?	= No

Roof Snow Load (psf), $P_f$	= 40
Ground Snow Load (psf), $P_g$	= 40.00
Importance - Snow	= 1.00
Snow Exposure, $C_e$	= 1.00
Thermal Factor, $C_t$	= 1.00
Sloped Factor, $C_s$	= 1.00

Wind Speed, Ultimate (mph)	= 130
Importance - Wind	= 1.00
Wind Exposure	= C
Closed/Open	= Closed
Internal Pressure Coeff.	= 0.18 / -0.18

Seismic, Ss	=	0.177
Seismic, S1	=	0.059
Seismic, Sds	=	0.183
Seismic, Sd1	=	0.094
Importance - Seismic	=	1.00
Seismic Response Coeff, Cs	=	0.058
Response Modification Coef, R	=	3.25
Longitudinal Base Shear (kips)	=	3.37
Transverse Base Shear (kips)	=	1.42
Site Class	=	D
Seismic Design Category	=	B

Analysis Procedure:  
Equivalent Lateral Force  
Seismic Force Resisting Systems:  
Steel Ordinary Moment Frame (OMF)  
Steel Ordinary Concentrically Braced Frame (OCBF)

5. Loading conditions are:

- ```

1 Dead+Collateral+Snow
2 0.6Dead+0.6Wind_Left1
3 0.6Dead+0.6Wind_Right1
4 0.6Dead+0.6Wind_Long1L
5 0.6Dead+0.6Wind_Long2L
6 0.6Dead+0.6Wind_Right2+0.6Wind_Suction
7 0.6Dead+0.6Wind_Right2+0.6Wind_Pressure
8 Dead+Collateral+0.6Wind_Suction+0.6Wind_Long2L
9 0.6Dead+0.6Wind_Left2+0.6Wind_Pressure
10 0.6Dead+0.6Wind_Left2+0.6Wind_Suction
11 Dead+Collateral+E2UNB_SL_
12 Dead+Collateral+E2UNB_SL_R

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Diagram of a portal frame structure. The frame consists of a horizontal beam and two vertical columns. The left support is labeled 'H' and 'V', with a horizontal force 'H' acting to the right. The right support is labeled 'A' and 'V', with a horizontal force 'H' acting to the right. The frame has a gabled roof. The beam is labeled 'COLUMN LINE' at its right end.

| Frm<br>Line | Col<br>Line | Column_Reactions(k ) |             |             |            |             |             |
|-------------|-------------|----------------------|-------------|-------------|------------|-------------|-------------|
|             |             | Load<br>Id           | Hmax<br>H   | V<br>Vmax   | Load<br>Id | Hmin<br>H   | V<br>Vmin   |
| 1           | H           | 1                    | 3.4         | 9.2         | 2          | -2.3        | -3.8        |
| 1           | A           | 3<br>1               | 2.3<br>-3.4 | -3.8<br>9.2 | 1<br>3     | -3.4<br>2.3 | 9.2<br>-3.8 |

| Frm<br>Line | Col<br>Line | Column_Reactions(k ) |             |              |            | V            |              |
|-------------|-------------|----------------------|-------------|--------------|------------|--------------|--------------|
|             |             | Load<br>Id           | Hmax<br>H   | V<br>Vmax    | Load<br>Id | Hmin<br>H    | V<br>Vmin    |
| 2           | H           | 1                    | 9.7         | 22.3         | 2<br>4     | -4.6<br>0.2  | -7.4<br>-7.7 |
| 2           | A           | 3<br>1               | 4.6<br>-9.7 | -7.4<br>22.3 | 1<br>5     | -9.7<br>-0.2 | 22.3<br>-7.7 |

| Frm<br>Line | Col<br>Line | Column_Reactions(k) |            |             |            |             |              |
|-------------|-------------|---------------------|------------|-------------|------------|-------------|--------------|
|             |             | Load<br>Id          | Hmax<br>H  | V<br>Vmax   | Load<br>Id | Hmin<br>H   | V<br>Vmin    |
| 1           | G           | 6<br>8              | 1.0<br>1.0 | 0.0<br>0.0  | 7          | -0.9        | 0.0          |
| 1           | E           | 6<br>8              | 1.7<br>1.7 | 0.0<br>0.1  | 7          | -1.6        | 0.0          |
| 1           | D           | 6<br>8              | 1.7<br>1.7 | 0.0<br>0.1  | 7          | -1.6        | 0.0          |
| 1           | B           | 6<br>8              | 1.0<br>1.0 | 0.0<br>0.0  | 7          | -0.9        | 0.0          |
| 3           | A           | 1                   | 0.0        | 2.6         | 9          | -2.4        | -2.6         |
| 3           | C           | 10<br>11            | 2.0<br>0.0 | -2.7<br>7.6 | 9<br>10    | -1.8<br>2.0 | -2.7<br>-2.7 |
| 3           | F           | 6<br>12             | 2.0<br>0.0 | -2.7<br>7.6 | 7<br>6     | -1.8<br>2.0 | -2.7<br>-2.7 |
| 3           | H           | 1                   | 0.0        | 2.6         | 7          | -2.4        | -2.6         |

| Loc | Wall Line | Col Line | Reactions (k) |             |                 |                | Panel Wind | Shear (lb/ft) Seis | Note |
|-----|-----------|----------|---------------|-------------|-----------------|----------------|------------|--------------------|------|
|     |           |          | ± Wind Horiz  | ± Wind Vert | ± Seismic Horiz | ± Seismic Vert |            |                    |      |
|     | 1         |          |               |             |                 |                |            |                    | (h)  |
|     | A         | 2,3      | 4.0           | 2.4         | 0.7             | 0.4            |            |                    |      |
|     | 3         |          |               |             |                 |                | 29         | 6                  |      |
|     | H         | 3,2      | 4.0           | 2.4         | 0.7             | 0.4            |            |                    |      |

(h) Rigid frame at endwall

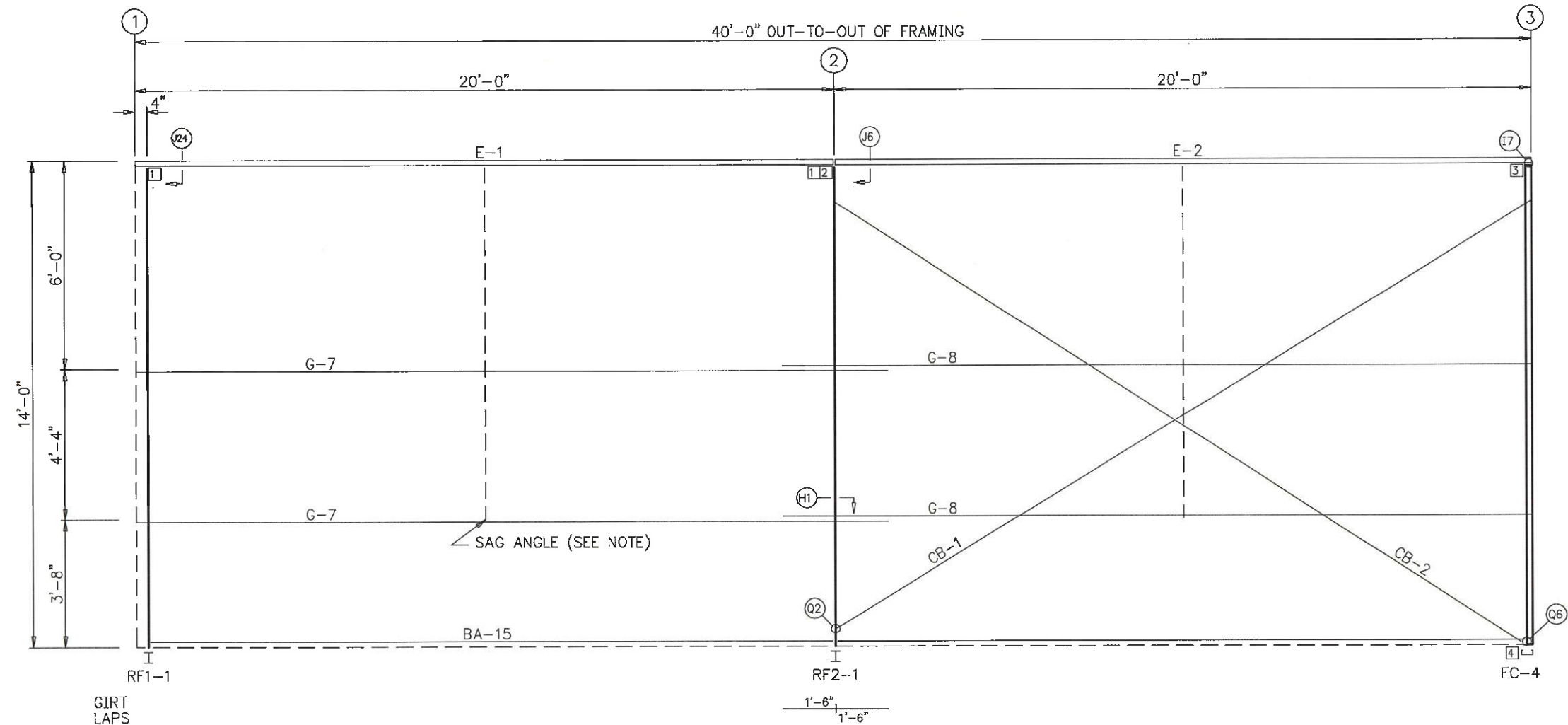


|                             |                   |
|-----------------------------|-------------------|
| BUYER : Marty McMullen      | DRAWN BY: R2C     |
| CUST. : Marty McMullen      | <u>6/ 9/20</u>    |
| SITE : Colorado Springs, CO | CHECK BY: MK      |
| DESCR: See Elevations       | <u>06/12/20</u>   |
| SCALE : NONE                | DES. ENG. : _____ |
| P.O. : B33530               | SHEET NO. A3 OF 3 |




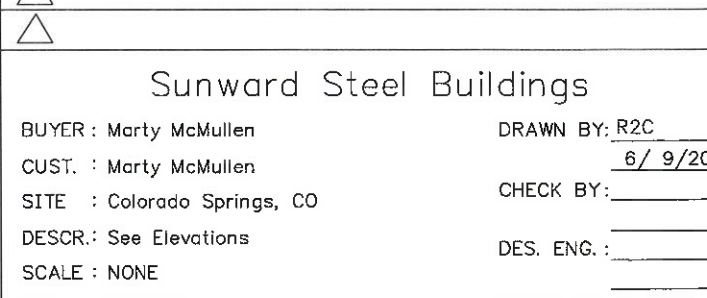
| CONNECTION PLATES |           |
|-------------------|-----------|
| FRAME LINE A      |           |
| ID                | MARK/PART |
| 1                 | FC060     |
| 2                 | ESA-1     |
| 3                 | FC065     |
| 4                 | FC015     |

| MEMBER TABLE |             |
|--------------|-------------|
| FRAME LINE A |             |
| MARK         | PART        |
| E-1          | 10C16       |
| E-2          | 10C16       |
| G-7          | 8Z16        |
| G-8          | 8Z16        |
| CB-1         | 5/16" CABLE |
| CB-2         | 5/16" CABLE |



ELEVATION AT: FRAME LINE A

**SAG ANGLE NOTES:**  
(MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS.  
ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE  
AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4  
POINTS OF BAY.

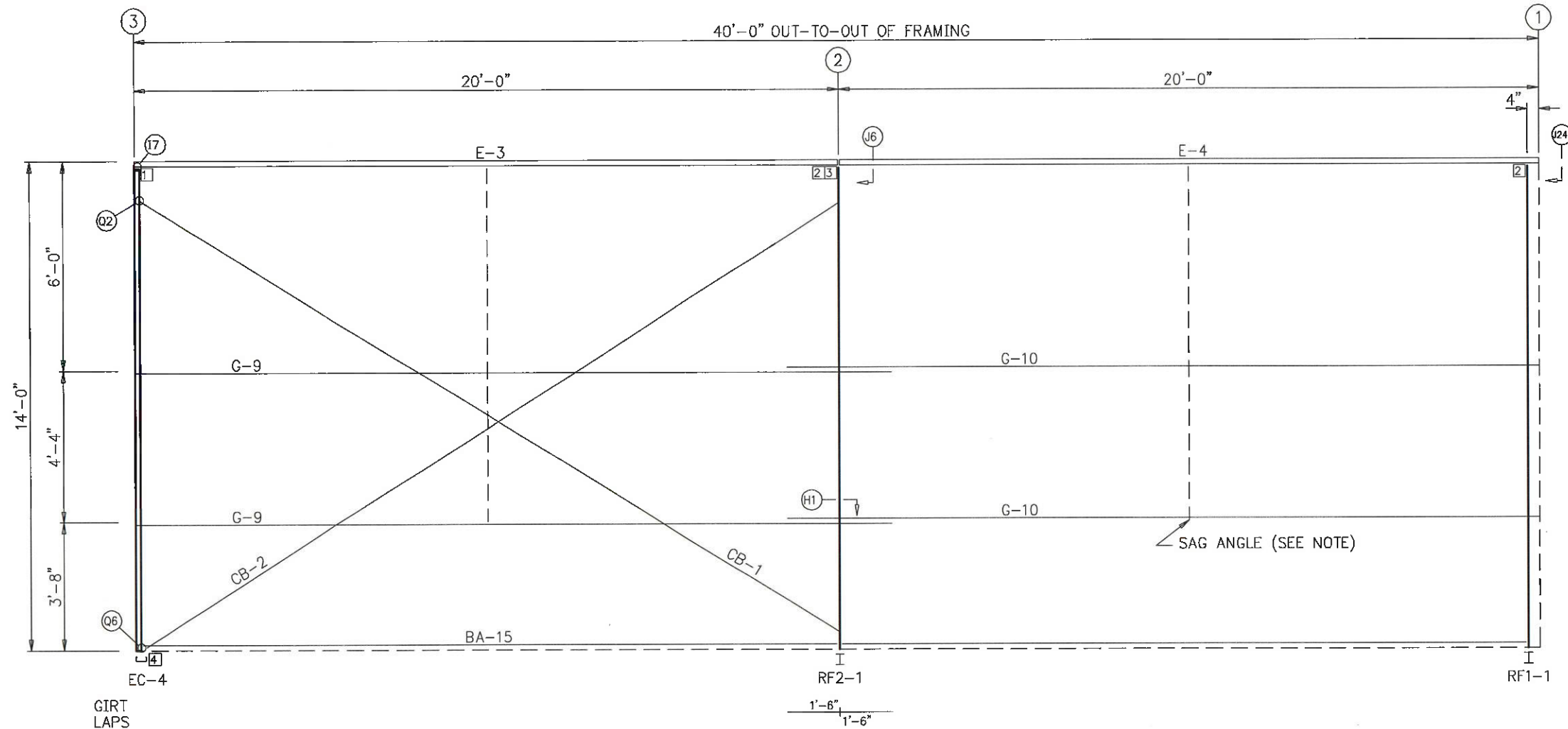
|        |                         |                              |                                  |                                           |                         |                                                                                       |                                                                                       |
|--------|-------------------------|------------------------------|----------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| LEGEND | A- SPECIAL ANGLE        | EC- ENDWALL COLUMN           | R- RAFTER                        | ZA- "Z" SHEETING ANGLE                    | N.S. NEAR SIDE          |  |  |
|        | AB- ANGLE BRACE         | ER- ENDWALL RAFTER           | RB- ROOF BEAM                    |                                           | O.C. ON CENTER          |                                                                                       |                                                                                       |
|        | BA- BASE/SHEETING ANGLE | FB- FLANGE BRACE             | RCH- RAKE CHANNEL                | A.F.F. ABOVE FINISH FLOOR                 | O.H. OPPOSITE HAND      |                                                                                       |                                                                                       |
|        | BCH- BASE CHANNEL       | FC- FRAMING CLIP             | RF- RIGID FRAME                  | A.S. AS SHOWN                             | R.O. ROUGH OPENING      |                                                                                       |                                                                                       |
|        | BM- BEAM                | G- GIRT                      | SA- SHEETING ANGLE               | B- BUILDING LINE                          | SIM. SIMILAR            |                                                                                       |                                                                                       |
|        | BR- BRACKET             | H- HEADER/SILL               | SC- SIDEWALL/STUB/SOLDIER COLUMN | C- CENTER LINE                            | S- STEEL LINE           |                                                                                       |                                                                                       |
|        | BS- BOSS                | J- JAMB                      |                                  | F.F. FINISH FLOOR                         | T.B.D. TO BE DETERMINED |                                                                                       |                                                                                       |
|        | CB- CROSS BRACE         | MB- MEZZANINE BEAM           | SJ- SUBJAMB                      | F.O. FRAMED OPENING                       | T.O.B. TOP OF BEAM      |                                                                                       |                                                                                       |
|        | CL- SPECIAL CLIP        | MC- MEZZANINE/MANSARD COLUMN | SR- SUPPORT RAFTER               | F.O.C. FACE OF COLUMN                     | T.O.J. TOP OF JOIST     |                                                                                       |                                                                                       |
|        | DH- DOOR HEADER         |                              | T- TRIM                          | F.S. FAR SIDE                             | TYP. TYPICAL            |                                                                                       |                                                                                       |
|        | DJ- DOOR JAMB           | MJ- MEZZANINE JOIST          | TC- TUBE COLUMN                  | N.A. NOT APPLICABLE                       | U.N. UNLESS NOTED       |                                                                                       |                                                                                       |
|        | E- EAVE STRUT           | P- PURLIN                    | TR- SPECIAL TRIM                 | N.B.M. NOT BY METAL BUILDING MANUFACTURER |                         |                                                                                       |                                                                                       |
|        | EE- EAVE EXTENSION      | PC- PIPE/PARAPET COLUMN      | TS- TUBE STRUT                   |                                           |                         |                                                                                       |                                                                                       |
|        | EB- EXTENSION BEAM      | PS- PURLIN/PIPE STRUT        | WF- WIND FRAME                   |                                           |                         |                                                                                       |                                                                                       |

BUYER : Marty McMullen  
CUST. : Marty McMullen  
SITE : Colorado Springs, CO  
DESCR.: See Elevations  
SCALE : NONE  
P.O. : B33530

DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. E1 OF 9

| CONNECTION PLATES |           |
|-------------------|-----------|
| FRAME LINE H      |           |
| ID                | MARK/PART |
| 1                 | FC065     |
| 2                 | FC060     |
| 3                 | ESA-1     |
| 4                 | FC015     |

| MEMBER TABLE |             |
|--------------|-------------|
| FRAME LINE H |             |
| MARK         | PART        |
| E-3          | 10C16       |
| E-4          | 10C16       |
| G-9          | 8Z16        |
| G-10         | 8Z16        |
| CB-1         | 5/16" CABLE |
| CB-2         | 5/16" CABLE |



ELEVATION AT: FRAME LINE H

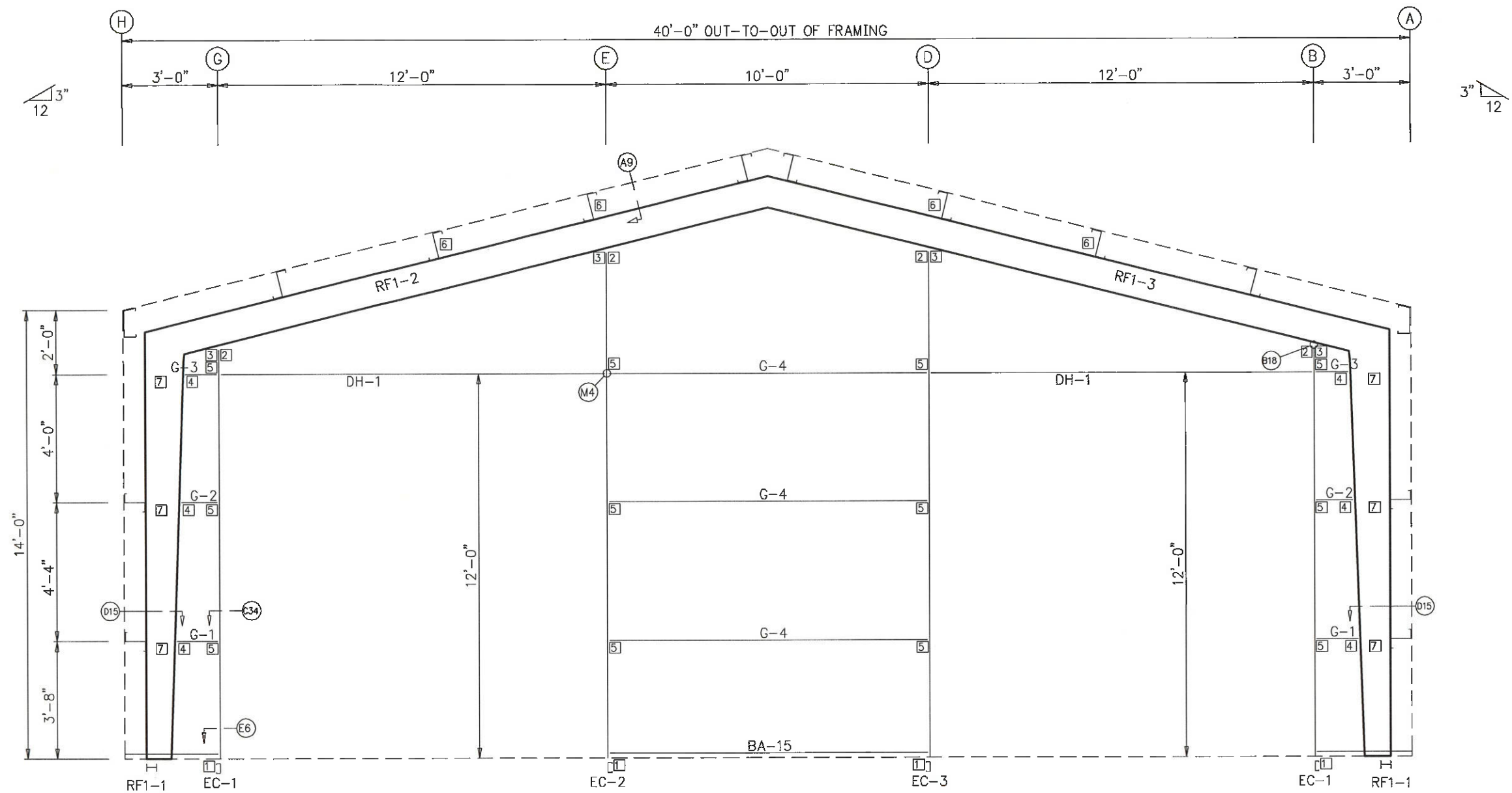
**SAG ANGLE NOTES:**  
(MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS.  
ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE  
AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4  
POINTS OF BAY.



Sunward Steel Buildings

BUYER : Marty McMullen  
CUST. : Marty McMullen  
SITE : Colorado Springs, CO  
DESCR.: See Elevations  
SCALE : NONE  
P.O. : B33530

DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. E2 OF 9



| CONNECTION PARTS<br>LINE 1 |       |
|----------------------------|-------|
| ID                         | PART  |
| 1                          | FC014 |
| 2                          | FC118 |
| 3                          | FC117 |
| 4                          | FC031 |
| 5                          | FC033 |
| 6                          | FC008 |
| 7                          | ZA-45 |

| MEMBER TABLE<br>LINE 1 |          |
|------------------------|----------|
| PART                   | MATERIAL |
| EC-1                   | 8C16     |
| EC-2                   | 8C13     |
| EC-3                   | 8C13     |
| DH-1                   | 8C16     |
| G-1                    | 8Z16     |
| G-2                    | 8Z16     |
| G-3                    | 8Z16     |
| G-4                    | 8Z16     |

ELEVATION AT: LINE 1

BUILT-UP MEMBER ID, WHERE FORMAT IS: WAABCD

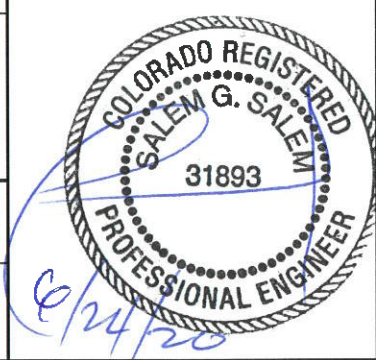
SHAPE = I  
 W = WELDED MEMBER TYPE  
 AA = MEMBER DEPTH IN INCHES  
 B = FLANGE WIDTH IN INCHES, 5=5", 6=6", 8=8", 10=10", 12=12"  
 C = FLANGE THICKNESS IN 1/16 INCH UNITS, 3=3/16", 4=1/4", 6=3/8", 8=1/2", 10=5/8", 12=3/4"  
 D = WEB THICKNESS IN 1/16 INCH UNITS, 2=.112", 3=.179", 4=.250", 5=.3125", 6=.375"

COLD FORMED MEMBER ID, WHERE FORMAT IS: ABCC

SHAPE = C, Z or D  
 A = DEPTH IN INCHES: 4=4", 8=8", 10=10", 12=12"  
 B = MEMBER TYPE: C=Cee, Z=Zee, D=Back to Back Cee  
 (FLANGE WIDTH PER TYPE: 4Z= 2 1/2", 8Z= 2 3/4", 10Z= 2 3/4", 12Z= 2 3/4", 4C= 2 1/2", 8C= 3", 10C= 3", 12C= 3")  
 CC = MATERIAL GAGE (THICKNESS)

X-BRACING MEMBER ID, WHERE FORMAT IS: AABBBB

AA = X-BRACE TYPE: CB=CABLE, RB=ROD  
 BBBB = X-BRACE DIAMETER: 0313=5/16", 0375=3/8", 0500=1/2", 0625=5/8", 0750=3/4", 0875=7/8", 1000=1", 1125=1 1/8", 1250=1 1/4"



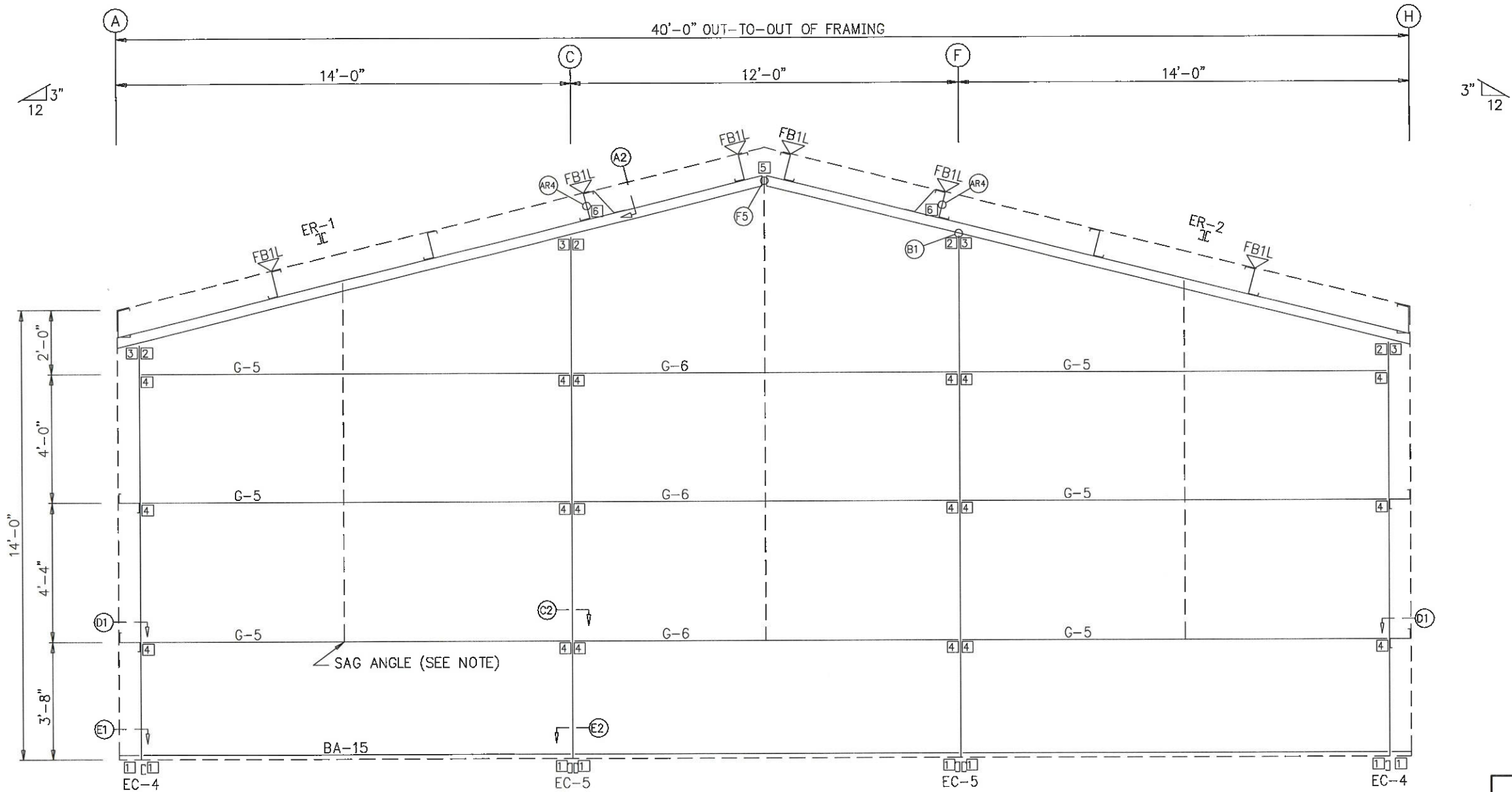
Sunward Steel Buildings  
 BUYER: Marty McMullen  
 CUST.: Marty McMullen  
 SITE: Colorado Springs, CO  
 DESCR.: See Elevations  
 SCALE: NONE  
 P.O.: B33530  
 DRAWN BY: R2C  
 CHECK BY: 6/9/20  
 DES. ENG.:  
 SHEET NO. E3 OF 9



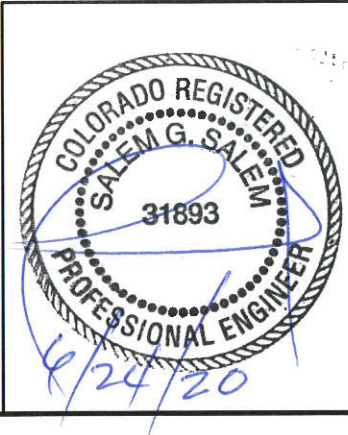
| FLANGE BRACE TABLE |      |         |
|--------------------|------|---------|
| LINE 3             |      |         |
| ▽ID                | PART | LENGTH  |
|                    | FB1L | 14 3/4" |

| CONNECTION PARTS |       |
|------------------|-------|
| LINE 3           |       |
| □ID              | PART  |
| 1                | FC013 |
| 2                | FC126 |
| 3                | FC125 |
| 4                | FC033 |
| 5                | FC136 |
| 6                | FC008 |

| MEMBER TABLE |          |
|--------------|----------|
| LINE 3       |          |
| PART         | MATERIAL |
| EC-4         | 8C16     |
| EC-5         | 8D16     |
| ER-1         | 8D14     |
| ER-2         | 8D14     |
| G-5          | 8Z16     |
| G-6          | 8Z16     |



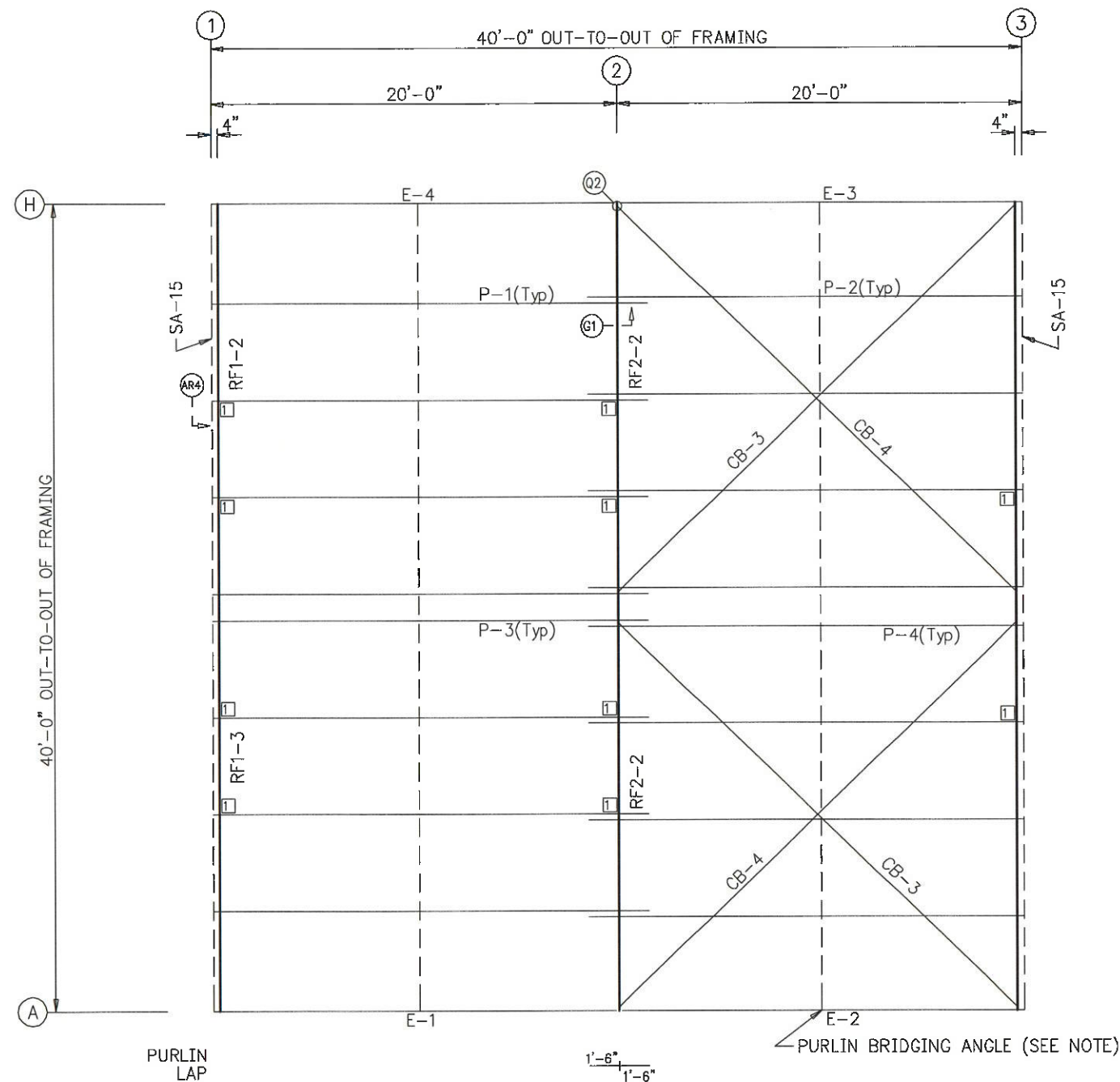
**SAG ANGLE NOTES:**  
(MARK: PBA-10, SIZE: 1"x1"x16 GAGE)  
IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS.  
ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE  
AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4  
POINTS OF BAY.



|                            |                   |
|----------------------------|-------------------|
| Sunward Steel Buildings    |                   |
| BUYER: Marty McMullen      | DRAWN BY: R2C     |
| CUST.: Marty McMullen      | 6/ 9/20           |
| SITE: Colorado Springs, CO | CHECK BY:         |
| DESCR.: See Elevations     | DES. ENG.:        |
| SCALE: NONE                |                   |
| P.O.: B33530               | SHEET NO. E4 OF 9 |

| CONNECTION PLATES |           |
|-------------------|-----------|
| ROOF PLAN         |           |
| ID                | MARK/PART |
| 1                 | FC008     |

| MEMBER TABLE |             |
|--------------|-------------|
| ROOF PLAN    |             |
| MARK         | PART        |
| P-1          | 10Z13       |
| P-2          | 10Z13       |
| P-3          | 10Z13       |
| P-4          | 10Z13       |
| E-1          | 10C16       |
| E-2          | 10C16       |
| E-3          | 10C16       |
| E-4          | 10C16       |
| CB-3         | 5/16" CABLE |
| CB-4         | 5/16" CABLE |



ROOF FRAMING PLAN

PURLIN CLIP NOTES:

- 1) PURLIN CLIP(S) AS REQUIRED, SEE ROOF FRAMING PLAN.
- 2) SEE DETAIL SECTIONS "A\_" ON ENDWALL ELEVATIONS FOR PURLIN TO RAFTER DETAILS.
- 3) LOCATE PURLIN CLIP INSIDE OF ROOF PURLIN.

PURLIN BRIDGING ANGLE NOTES:

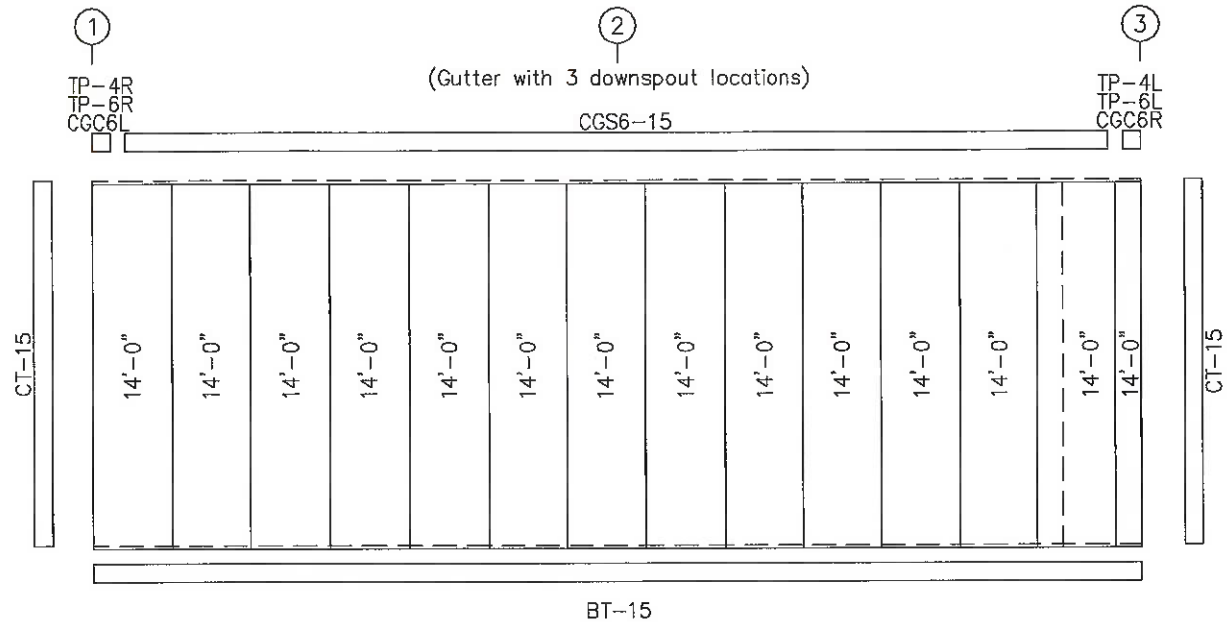
(MARK: PBA-10, SIZE: 1"x1"x16 GAGE)

IF SHOWN, LOCATE PBA-10 AS INDICATED ON DRAWINGS. ONE ROW IS AT MIDPOINT OF BAY, TWO ROWS ARE AT 1/3 POINTS OF BAY, THREE ROWS ARE AT 1/4 POINTS OF BAY.

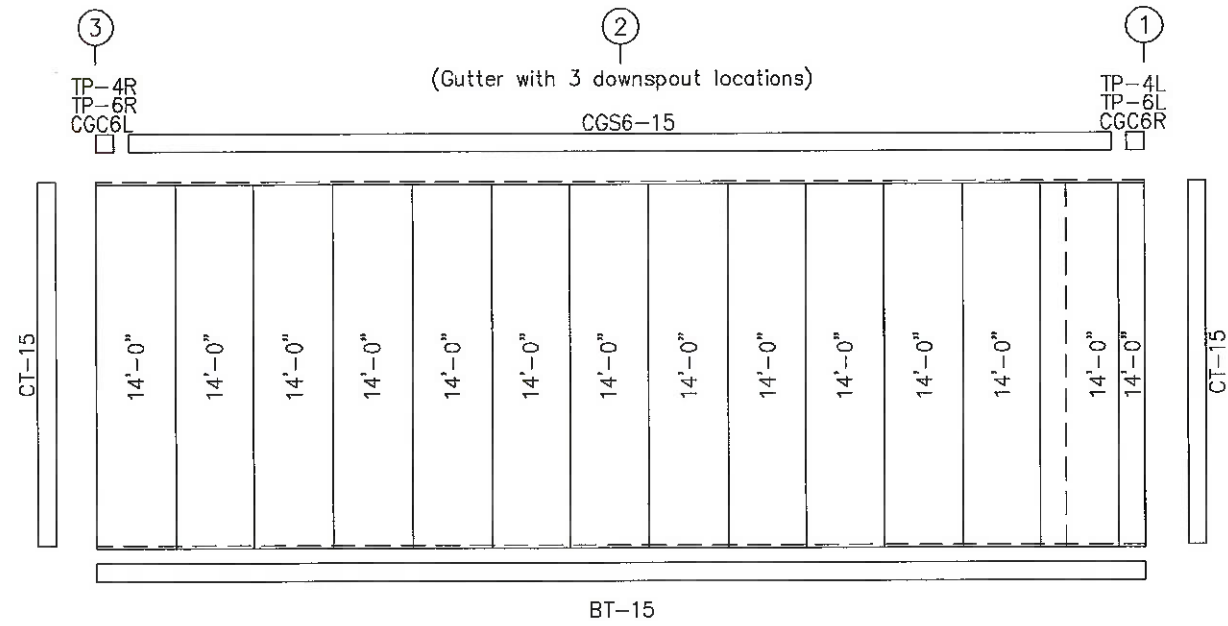


|                             |                   |
|-----------------------------|-------------------|
| Sunward Steel Buildings     |                   |
| BUYER : Marty McMullen      | DRAWN BY: R2C     |
| CUST. : Marty McMullen      | 6/ 9/20           |
| SITE : Colorado Springs, CO | CHECK BY: _____   |
| DESCR.: See Elevations      | DES. ENG.: _____  |
| SCALE : NONE                |                   |
| P.O. : B33530               | SHEET NO. E5 OF 9 |

| TRIM TABLE<br>FRAME LINE A & H |         |        |         |
|--------------------------------|---------|--------|---------|
| ◇ID                            | PART    | LENGTH | DETAIL  |
|                                | CGS6-15 | 182"   | TRIM_61 |
|                                | CGC6L   |        | TRIM_84 |
|                                | CGC6R   |        | TRIM_84 |
|                                | CT-15   | 182"   | TRIM_30 |
|                                | BT-15   | 182"   | TRIM_5  |



ELEVATION AT: FRAME LINE A  
26 Ga. HR



ELEVATION AT: FRAME LINE H  
26 Ga. HR

**IMPORTANT NOTE!**

TRIM OVERLAP TO BE 1½" (MAXIMUM). REFER  
TO PAGE 32 OF THE BUILDING ERECTION MANUAL.

**SHEETING NOTES:**

- 1) WALL SHEETS TO BE FIELD CUT AT FRAMED OPENINGS  
AS REQUIRED.
- 2) ROOF PITCHES GREATER THAN 1:12 REQUIRE WALL  
SHEETS TO BE FIELD CUT AT THE SLOPE OF BUILDING.



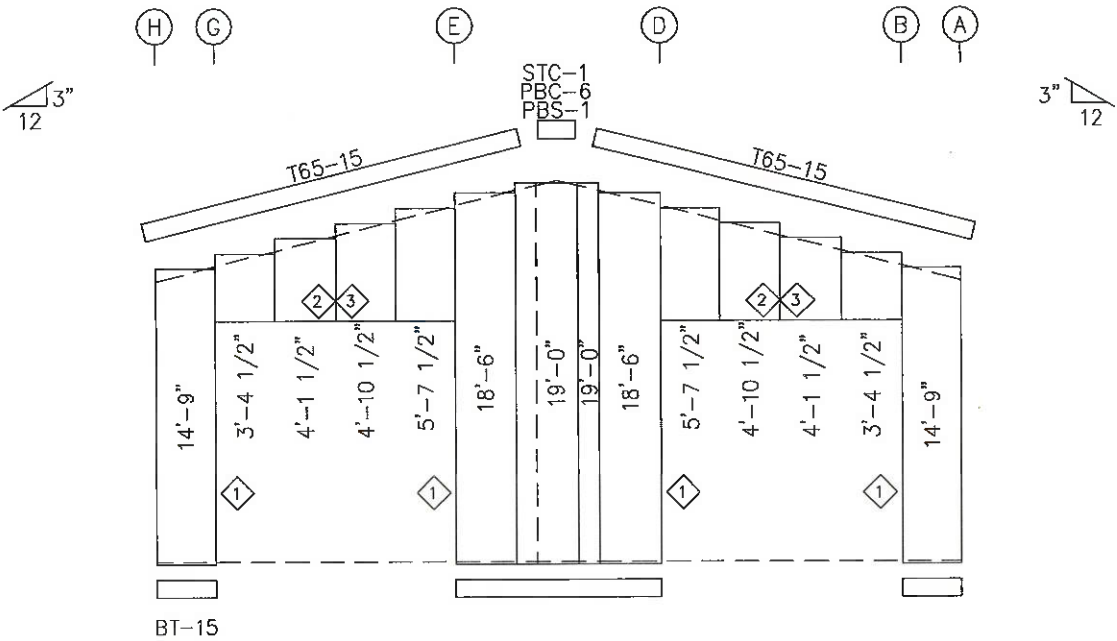
**Sunward Steel Buildings**

BUYER : Marty McMullen  
CUST. : Marty McMullen  
SITE : Colorado Springs, CO  
DESCR.: See Elevations  
SCALE : NONE  
P.O. : B33530

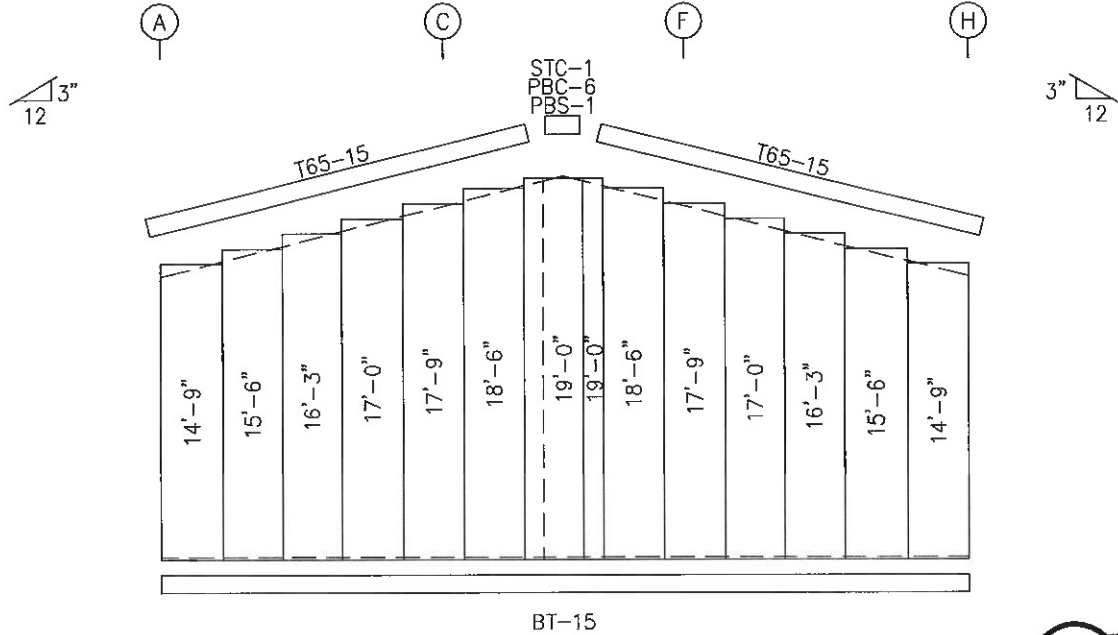
DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. E6 OF 9



| TRIM TABLE<br>LINE 1 & 3 |          |        |         |
|--------------------------|----------|--------|---------|
| ID                       | MATERIAL | LENGTH | DETAIL  |
|                          | T65-15   | 182"   | TRIM_72 |
|                          | PBS-1    |        | TRIM_76 |
|                          | BT-15    |        | TRIM_5  |
| 1                        | JT-158   | 182"   | TRIM_10 |
| 2                        | HDT-15   | 182"   | TRIM_9  |
| 3                        | HT-158   | 182"   | TRIM_9  |




ELEVATION AT: LINE 1  
26 Ga. HR



ELEVATION AT: LINE 3  
26 Ga. HR

**IMPORTANT NOTE!**  
TRIM OVERLAP TO BE 1½" (MAXIMUM). REFER  
TO PAGE 32 OF THE BUILDING ERECTION MANUAL.

- SHEETING NOTES:**
- 1) WALL SHEETS TO BE FIELD CUT AT FRAMED OPENINGS AS REQUIRED.
  - 2) ROOF PITCHES GREATER THAN 1:12 REQUIRE WALL SHEETS TO BE FIELD CUT AT THE SLOPE OF BUILDING.



▲

▲

▲

Sunward Steel Buildings

BUYER : Marty McMullen

CUST. : Marty McMullen

SITE : Colorado Springs, CO

DESCR.: See Elevations

SCALE : NONE

P.O. : B33530

DRAWN BY: R2C

6/ 9/20

CHECK BY: \_\_\_\_\_

DES. ENG. : \_\_\_\_\_

SHEET NO. E7 OF 9

| SPLICE PLATE & BOLT TABLE |     |   |     |      |      |        |       |       |           |
|---------------------------|-----|---|-----|------|------|--------|-------|-------|-----------|
| Mark                      | Qty |   | Int | Type | Dia  | Length | Width | Thick | Length    |
| SP-1                      | 4   | 4 | 0   | A325 | 3/4" | 2"     | 6"    | 1/2"  | 1'-5 5/8" |

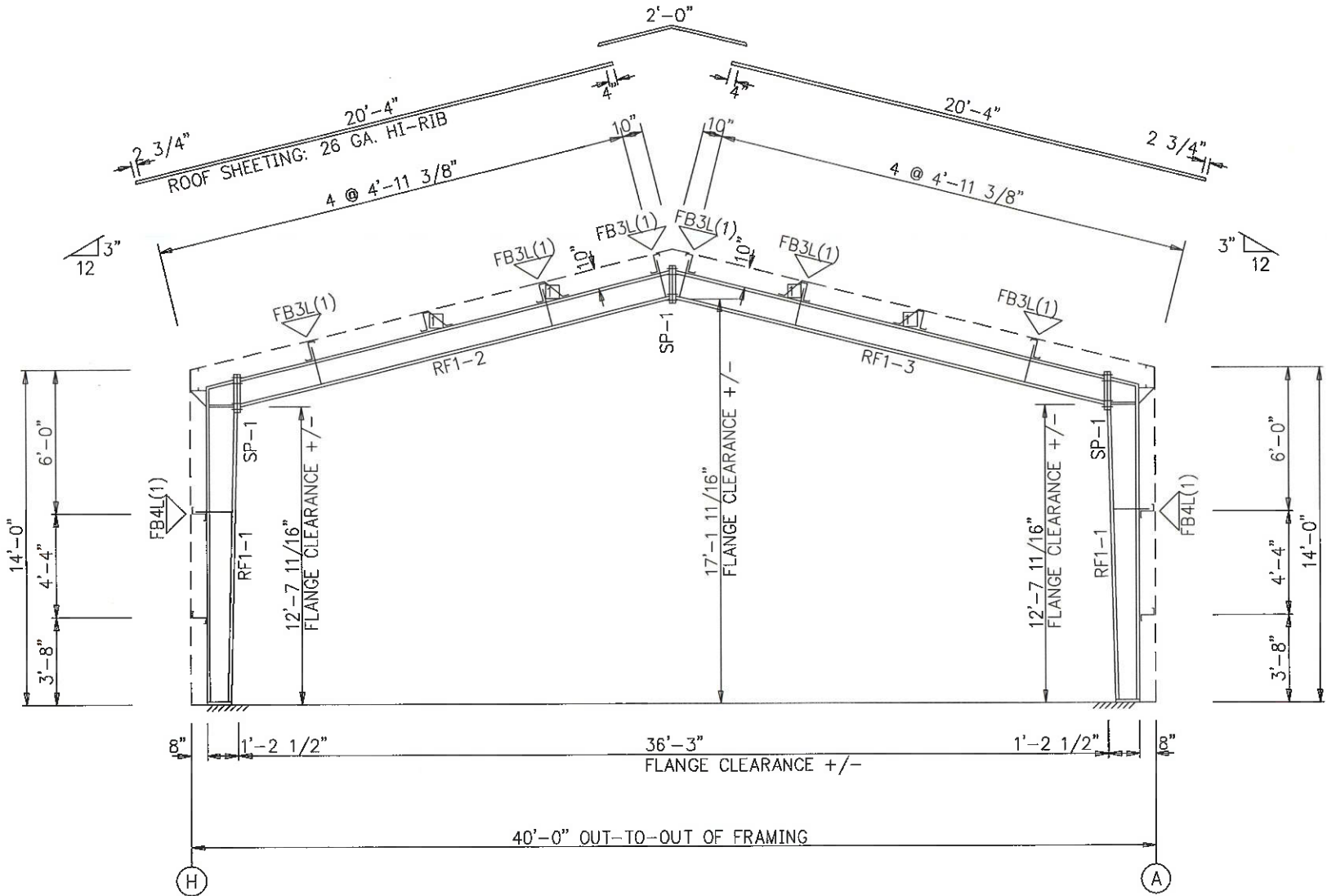
▽ FLANGE BRACES: BOTH SIDES (U.N.) OR  
PIECE MARK FOLLOWED BY (1)= 1 SIDE ONLY

FBxL= 1 1/2"x 1 1/2"x 1/8" H.R. ANGLE

| MEMBER TABLE |           |        |            |        |                                    |
|--------------|-----------|--------|------------|--------|------------------------------------|
| Mark         | Web Depth |        | Web Plate  |        | Outside Flange<br>W x Thk x Length |
|              | Start/End |        | Thick      | Length |                                    |
| RF1-1        | 9.0/13.1  | 11 ga. | 10'-0"     |        | 5 x 1/4" x 13'-2 15/16"            |
|              | 13.1/14.0 | 11 ga. | 2'-4 1/8"  |        | 5 x 1/4" x 1'-2 5/8"               |
|              | 14.0/14.0 | 0.179  | 1'-2 5/16" |        |                                    |
| RF1-2        | 11.0/11.0 | 11 ga. | 10'-0"     |        | 5 x 1/4" x 18'-6 13/16"            |
| RF1-3        | 11.0/11.0 | 11 ga. | 8'-9 5/8"  |        | 5 x 1/4" x 18'-6 13/16"            |
|              | 11.0/11.0 | 11 ga. | 10'-0"     |        | 5 x 1/4" x 18'-6 13/16"            |

CONNECTION PLATES

| ID | Mark/Part |
|----|-----------|
| 1  | FC008     |



RIGID FRAME ELEVATION: FRAME LINE 1



|                             |                   |
|-----------------------------|-------------------|
| Sunward Steel Buildings     |                   |
| BUYER : Marty McMullen      | DRAWN BY: R2C     |
| CUST. : Marty McMullen      | 6/ 9/20           |
| SITE : Colorado Springs, CO | CHECK BY: _____   |
| DESCR.: See Elevations      | DES. ENG.: _____  |
| SCALE : NONE                |                   |
| P.O. : B33530               | SHEET NO. E8 OF 9 |

| SPLICE PLATE & BOLT TABLE |     |   |     |      |      |        |       |       |             |
|---------------------------|-----|---|-----|------|------|--------|-------|-------|-------------|
| Mark                      | Qty |   | Int | Type | Dia  | Length | Width | Thick | Length      |
| SP-1                      | 4   | 4 | 2   | A325 | 3/4" | 2"     | 6"    | 1/2"  | 2'-2 15/16" |
| SP-2                      | 4   | 4 | 0   | A325 | 3/4" | 2"     | 6"    | 1/2"  | 1'-4 9/16"  |

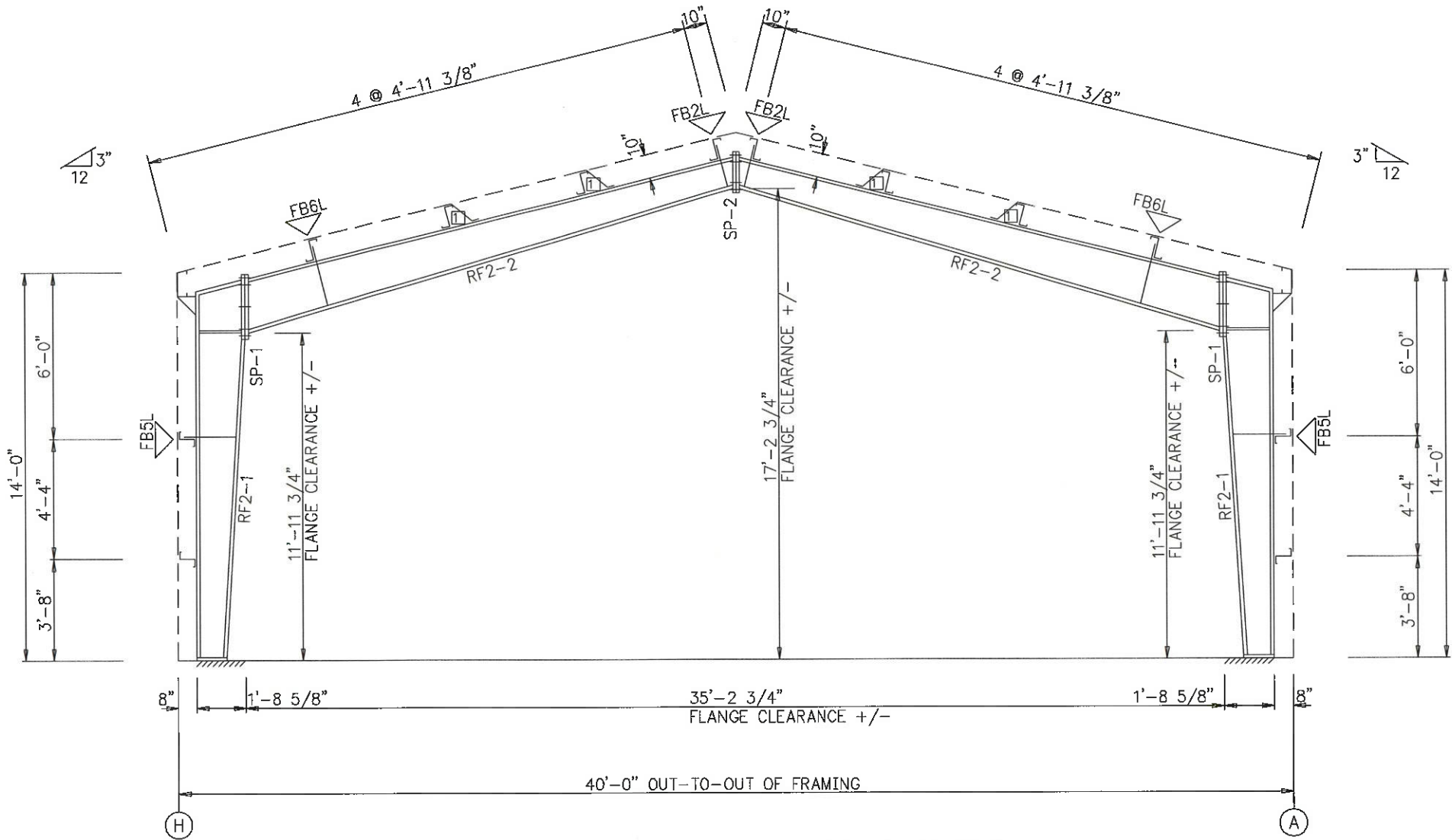
▽ FLANGE BRACES: BOTH SIDES (U.N.) OR  
PIECE MARK FOLLOWED BY (1)= 1 SIDE ONLY

FBxL= 1 1/2"x 1 1/2"x 1/8" H.R. ANGLE

| MEMBER TABLE |           |       |              |                         |                        |
|--------------|-----------|-------|--------------|-------------------------|------------------------|
| Mark         | Web Depth |       | Web Plate    |                         | Outside Flange         |
|              | Start/End | Thick | Length       | W x Thk x Length        | Inside Flange          |
| RF2-1        | 10.0/18.3 | 0.179 | 9'-8 5/16"   | 5 x 1/4" x 13'-2 15/16" | 5 x 3/8" x 11'-8 5/8"  |
|              | 18.3/20.0 | 0.179 | 2'-0"        | 5 x 1/4" x 1'-8 13/16"  |                        |
|              | 20.0/20.0 | 1/4"  | 1'-11 11/16" |                         |                        |
|              | 20.0/14.5 | 0.179 | 10'-0"       | 5 x 1/4" x 18'-0 11/16" | 5 x 3/8" x 8'-5 13/16" |
| RF2-2        | 14.5/10.0 | 0.179 | 8'-5 3/4"    |                         | 5 x 1/4" x 9'-9 9/16"  |

CONNECTION PLATES

| ID | Mark/Part |
|----|-----------|
| 1  | FC008     |



RIGID FRAME ELEVATION: FRAME LINE 2

Sunward Steel Buildings

BUYER: Marty McMullen

CUST.: Marty McMullen

SITE: Colorado Springs, CO

DESCR.: See Elevations

SCALE: NONE

P.O.: B33530

DRAWN BY: R2C

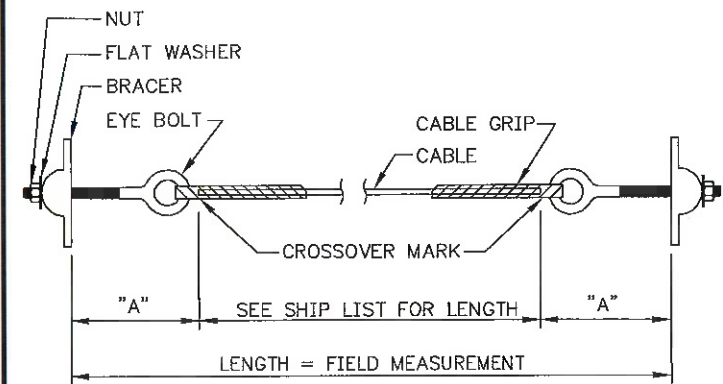
CHECK BY: 6/ 9/20

DES. ENG.:

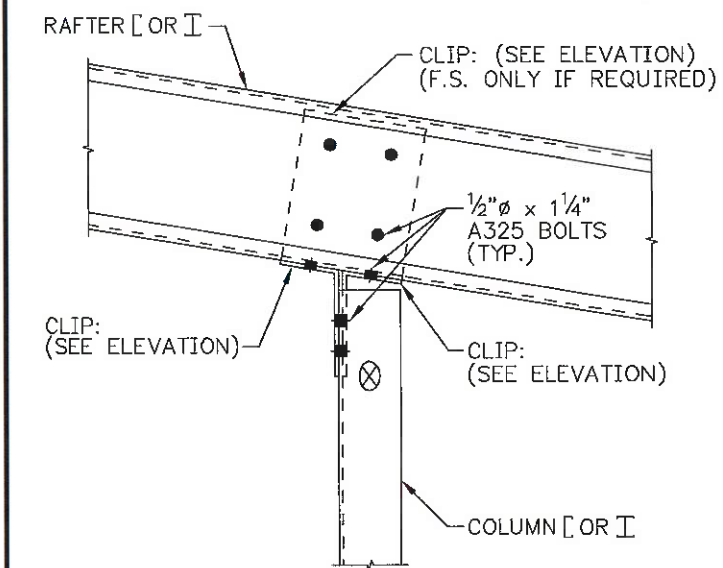
SHEET NO. E9 OF 9



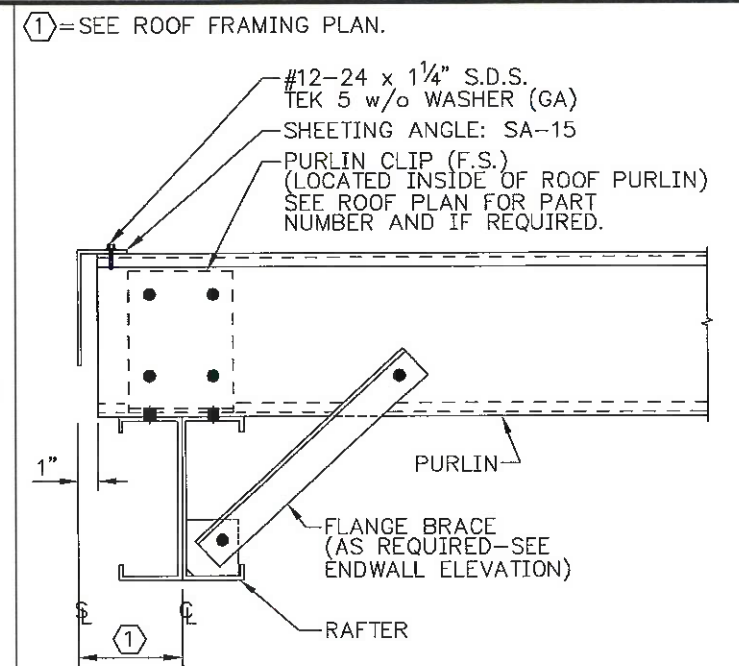
| REFERENCE CHART |       |      |      |
|-----------------|-------|------|------|
| CABLE           | 5/16" | 3/8" | 1/2" |
| EYE BOLT        | 5/8"  | 3/4" | 7/8" |
| "A" DIM.        | 9"    | 10"  | 12"  |



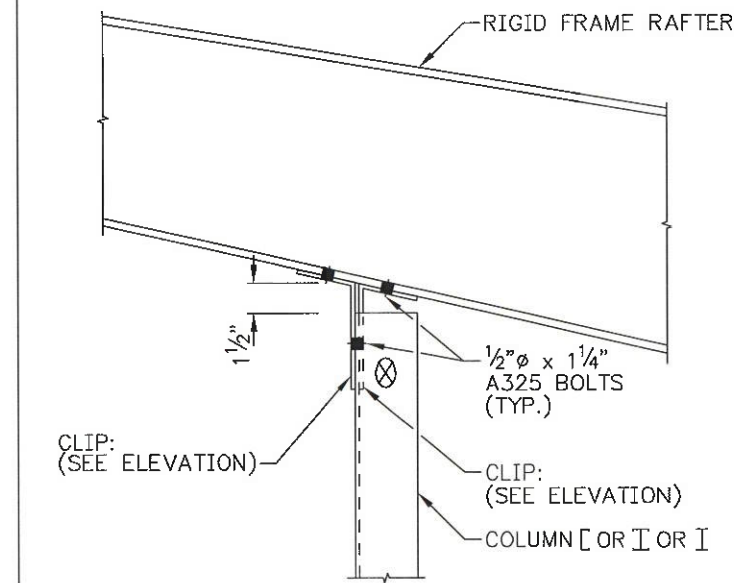
CABLE BRACING ASSEMBLY



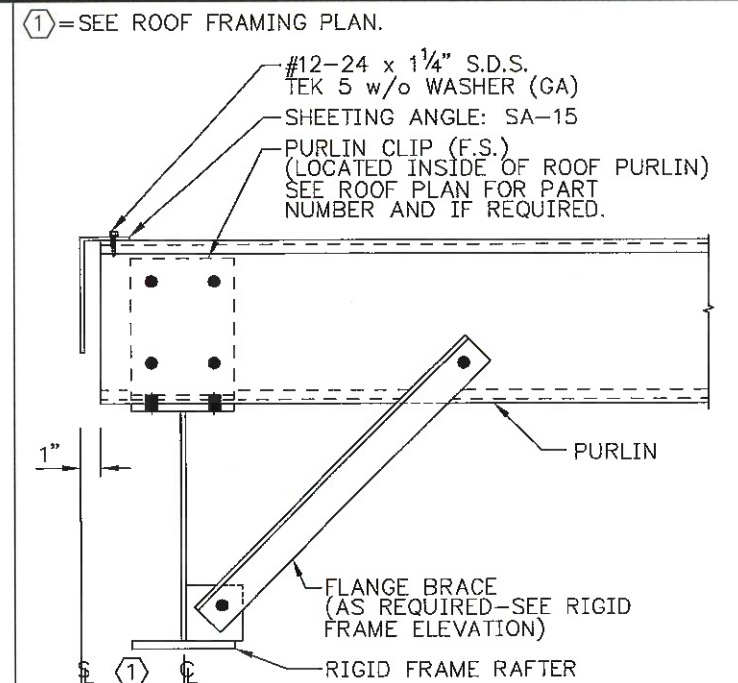
COLUMN TO RAFTER



PURLIN TO RAFTER

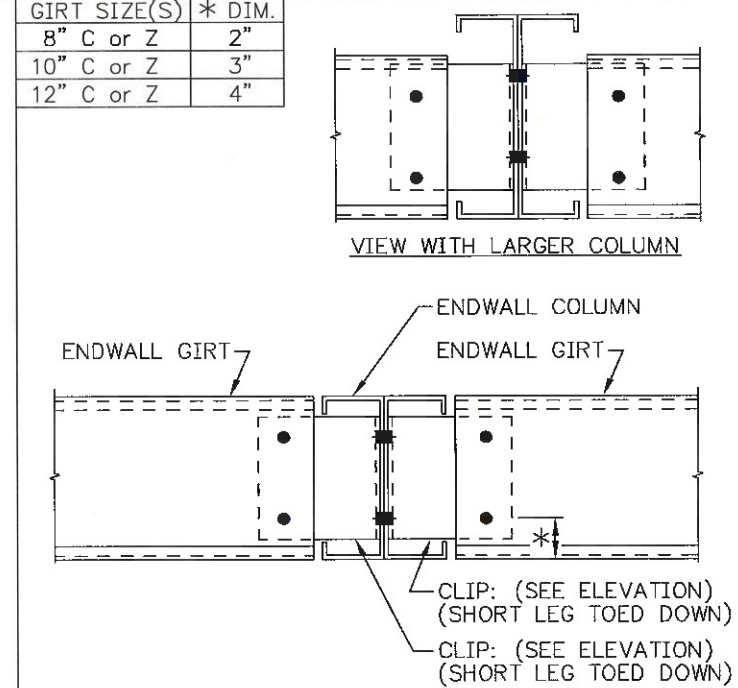


COLUMN TO RIGID FRAME RAFTER

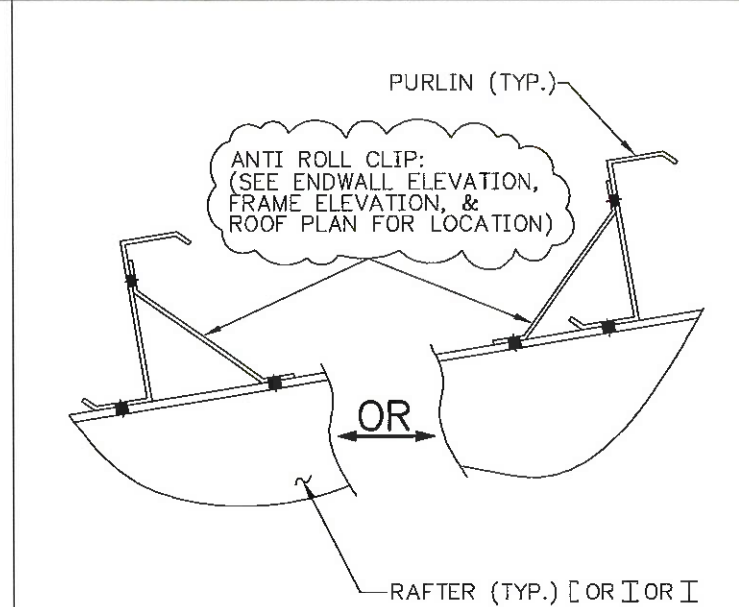


PURLIN TO RAFTER

| GIRT SIZE(S) | * DIM. |
|--------------|--------|
| 8" C or Z    | 2"     |
| 10" C or Z   | 3"     |
| 12" C or Z   | 4"     |

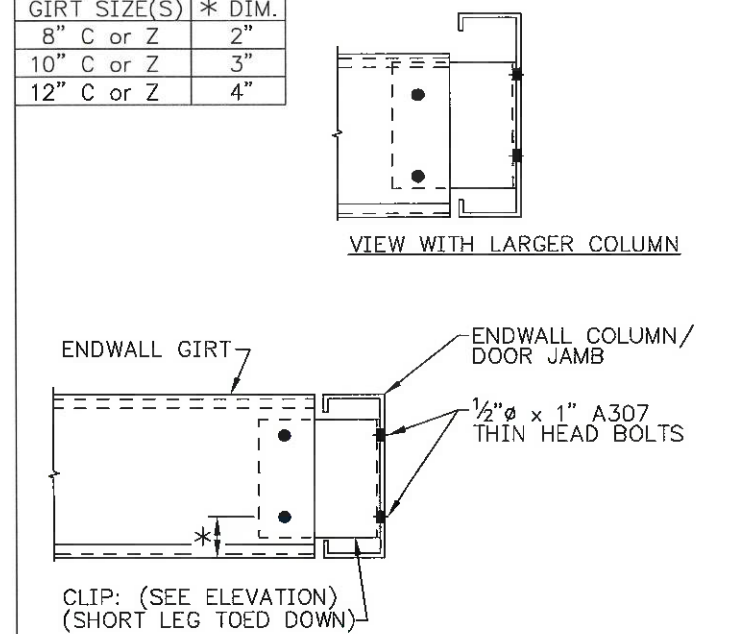


GIRTS TO ENDWALL COLUMN



ANTI-ROLL CLIP

| GIRT SIZE(S) | * DIM. |
|--------------|--------|
| 8" C or Z    | 2"     |
| 10" C or Z   | 3"     |
| 12" C or Z   | 4"     |



GIRT TO ENDWALL COLUMN

GENERAL NOTES:

- 1) ALL BOLTS ARE TO BE 1/2" x 1/4" A307 UNLESS NOTED.
- 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
- 3) ALL DIMENSIONS ARE +/-.
- 4) MATCH SHOP MARK "X" IF SHOWN.
- 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
- 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
- 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.

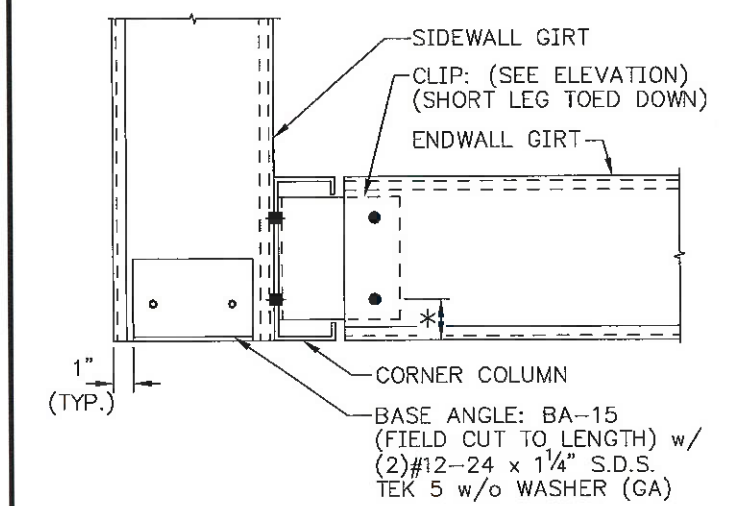


Sunward Steel Buildings

BUYER : Marty McMullen  
CUST. : Marty McMullen  
SITE : Colorado Springs, CO  
DESCR. : See Elevations  
SCALE : NONE  
P.O. : B33530

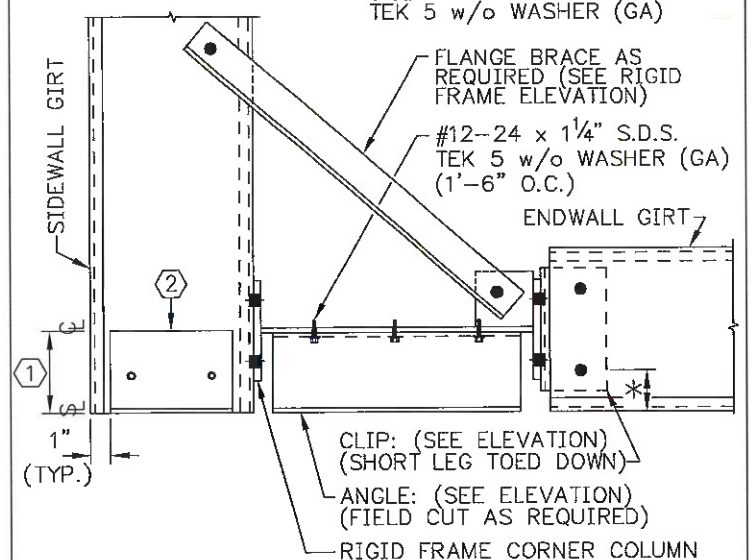
DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG. : \_\_\_\_\_  
SHEET NO. G1 OF 3

| GIRT SIZE(S) * DIM. |    |
|---------------------|----|
| 8" C or Z           | 2" |
| 10" C or Z          | 3" |
| 12" C or Z          | 4" |

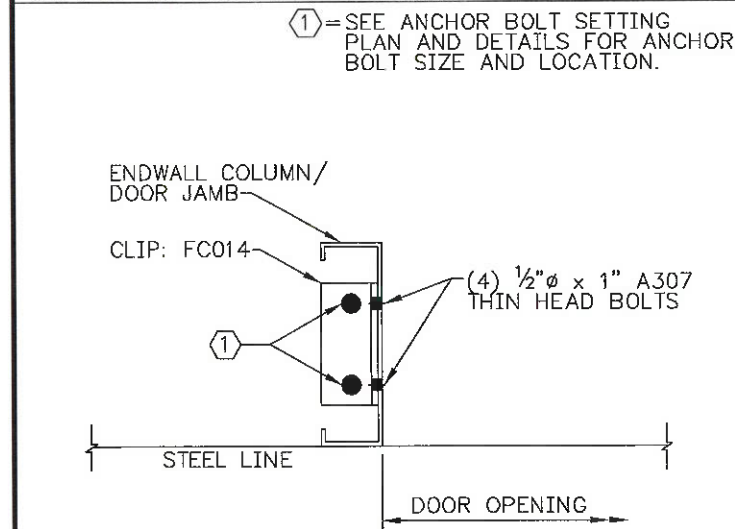


GIRTS TO CORNER COLUMN D1

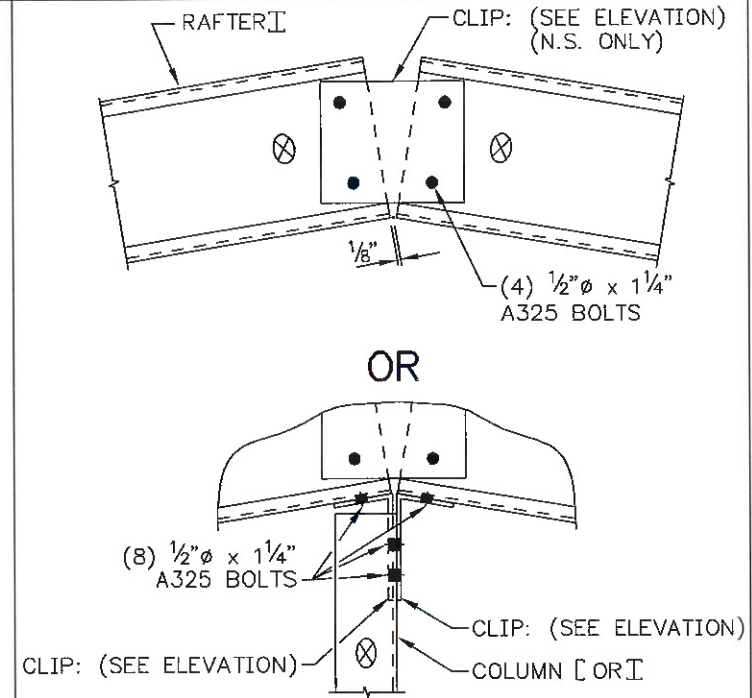
| GIRT SIZE(S) * DIM. |    |
|---------------------|----|
| 8" C or Z           | 2" |
| 10" C or Z          | 3" |
| 12" C or Z          | 4" |



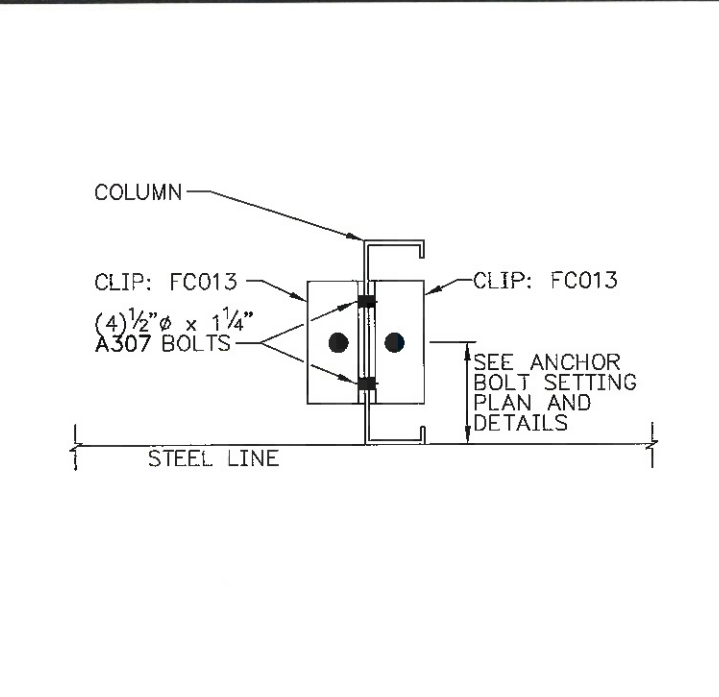
GIRTS TO R.F. CORNER COLUMN D15



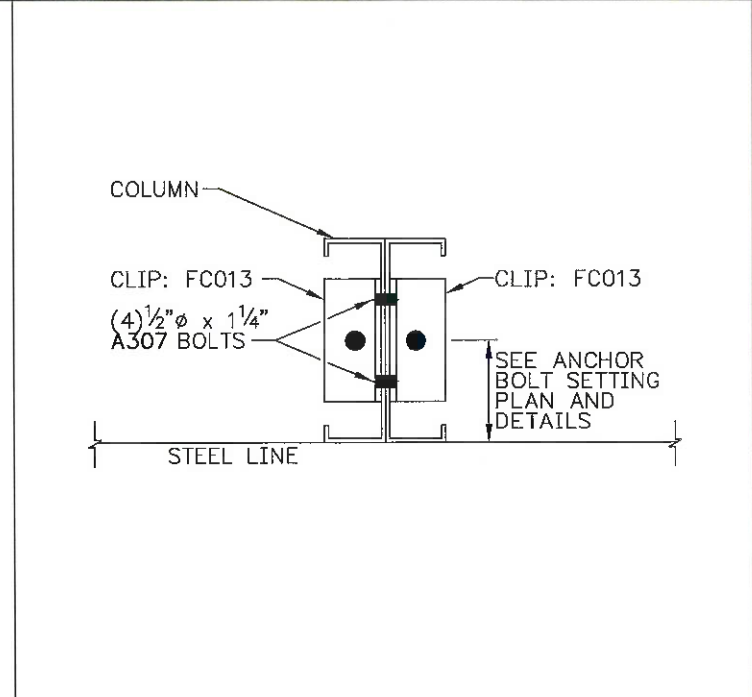
DOOR JAMB BASE DETAIL E6



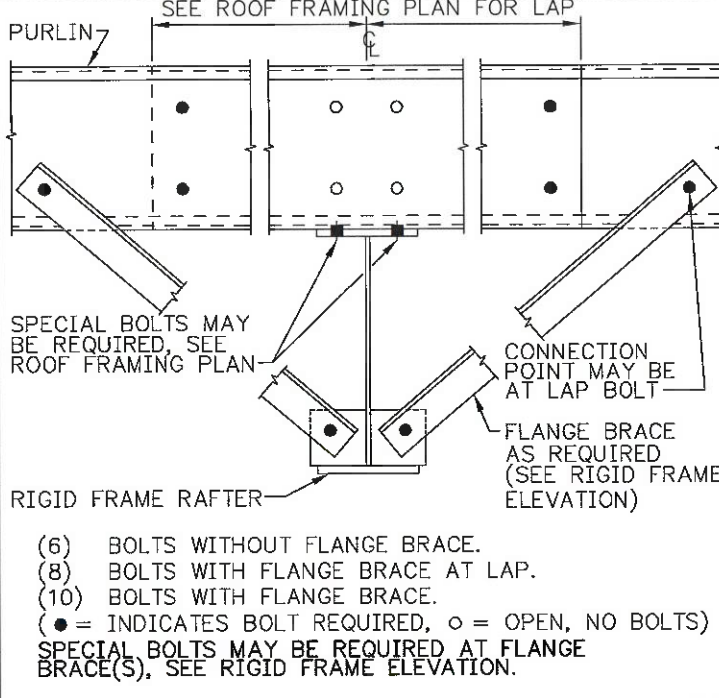
PEAK RAFTER DETAIL F5



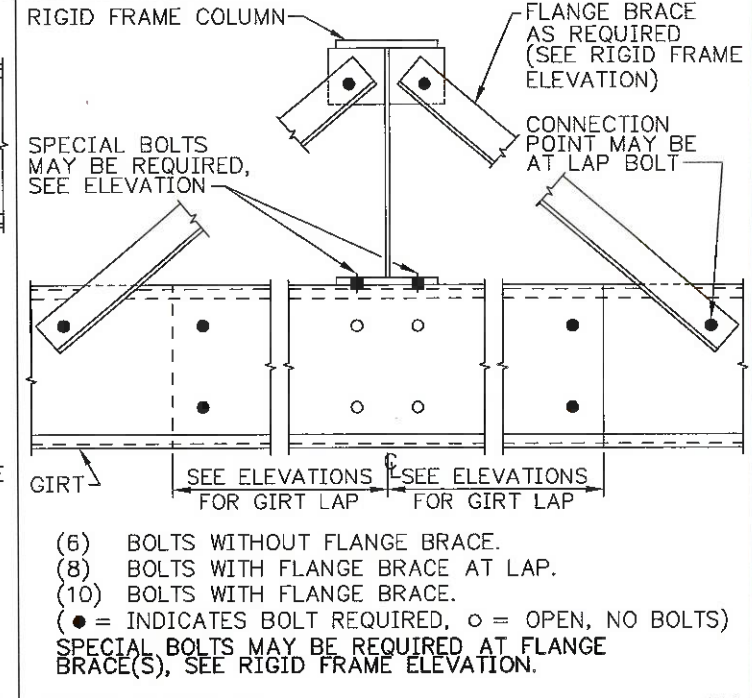
COLUMN BASE DETAIL E1



COLUMN BASE DETAIL E2



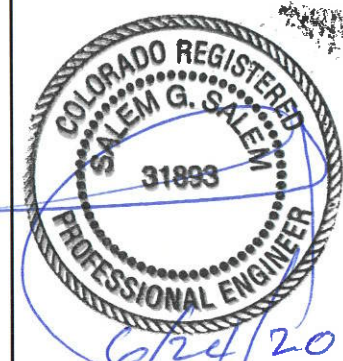
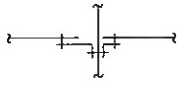
PURLIN OVERLAP G1



GIRT OVERLAP H1

GENERAL NOTES:

- 1) ALL BOLTS ARE TO BE 1/2" x 1 1/4" A307 UNLESS NOTED.
- 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
- 3) ALL DIMENSIONS ARE +/-.
- 4) MATCH SHOP MARK "X" IF SHOWN.
- 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
- 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
- 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



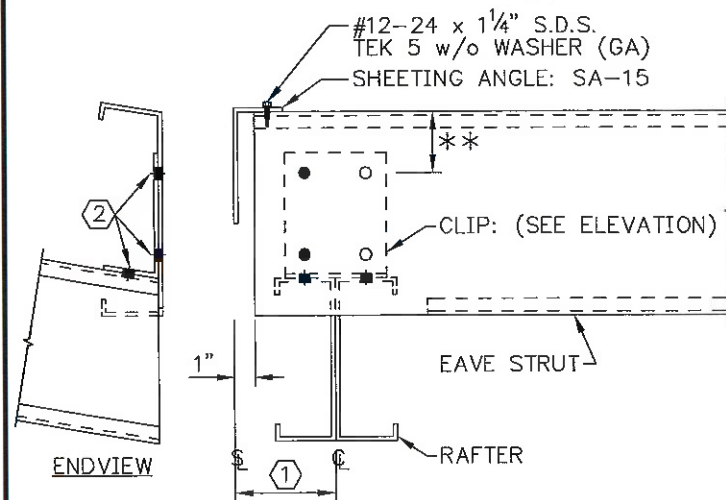
Sunward Steel Buildings

|                            |                   |
|----------------------------|-------------------|
| BUYER: Marty McMullen      | DRAWN BY: R2C     |
| CUST.: Marty McMullen      | 6/9/20            |
| SITE: Colorado Springs, CO | CHECK BY:         |
| DESCR.: See Elevations     | DES. ENG.:        |
| SCALE: NONE                |                   |
| P.O.: B33530               | SHEET NO. G2 OF 8 |



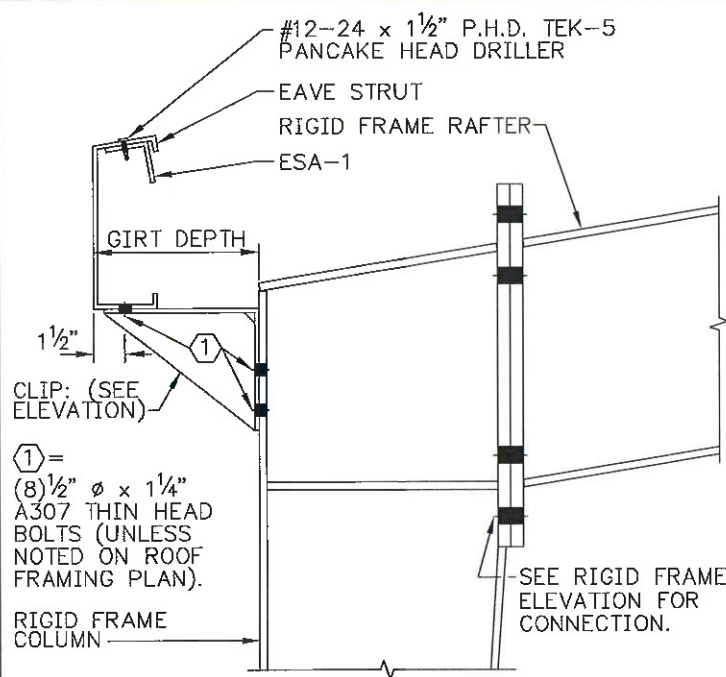
| EAVE STRUT<br>SIZE(S) | **<br>DIM. |
|-----------------------|------------|
| 8" C                  | 2"         |
| 10" C                 | 3"         |
| 12" C                 | 4"         |

- ①=SEE ROOF FRAMING PLAN.  
 ②=(4) 1/2"  $\phi$  x 1 1/4" A307 THIN HEAD BOLTS (UNLESS NOTED ON ROOF FRAMING PLAN).  
 ●=INDICATES BOLT REQUIRED.  
 ○=INDICATES OPEN, NO BOLTS.



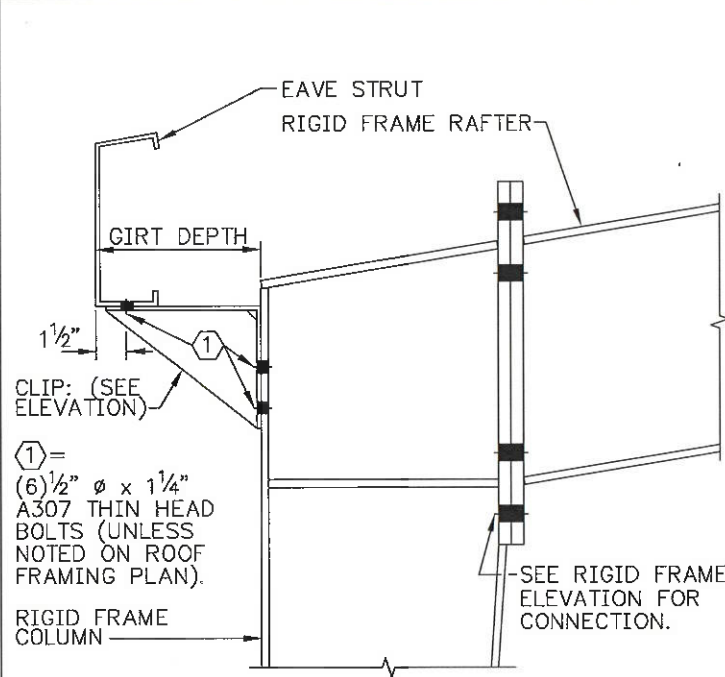
EAVE STRUT TO RAFTER

17



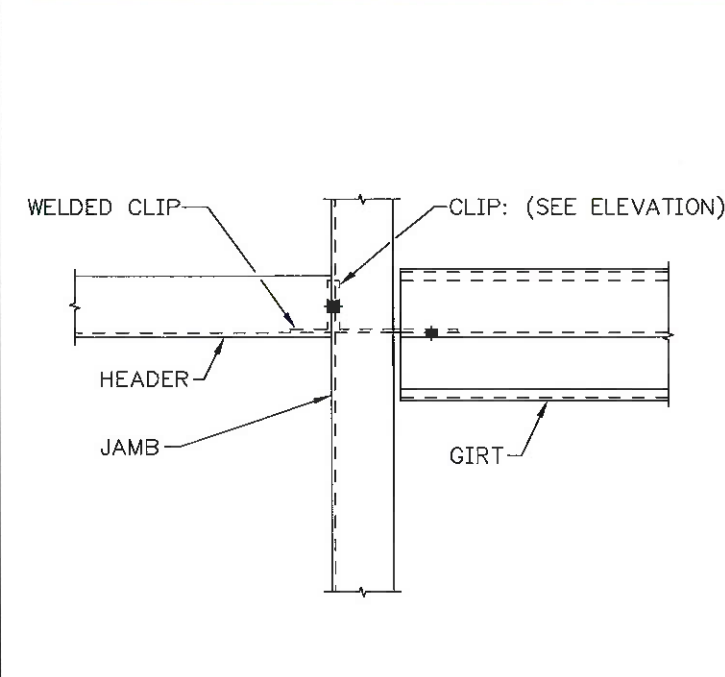
EAVE STRUT TO RIGID FRAME

J6



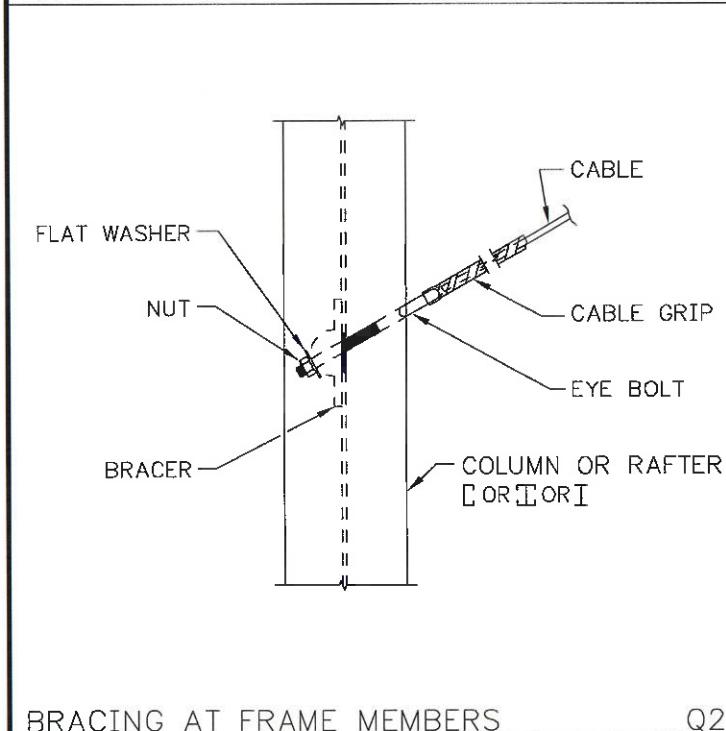
EAVE STRUT TO RIGID FRAME

J24



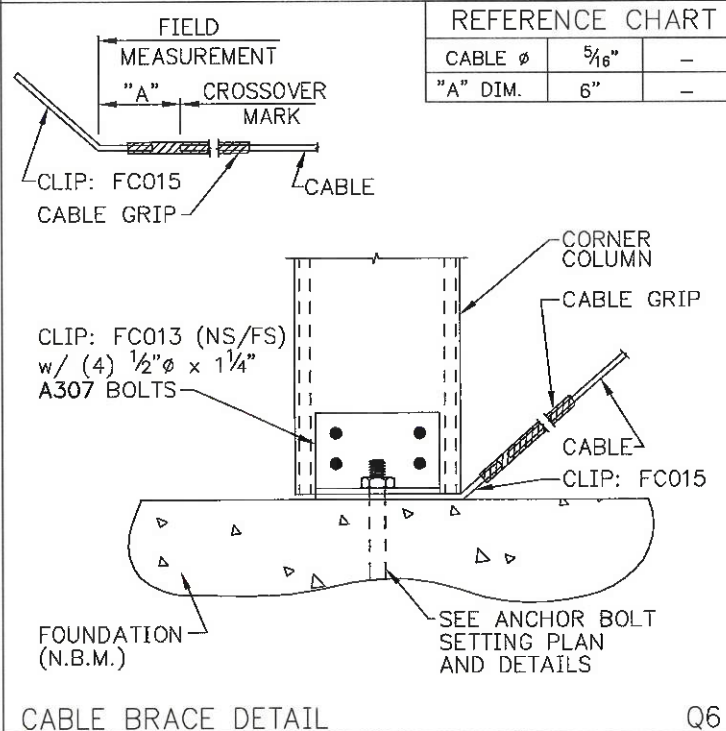
HEADER TO JAMB

M4



BRACING AT FRAME MEMBERS

Q2

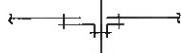


CABLE BRACE DETAIL

Q6

### GENERAL NOTES:

- 1) ALL BOLTS ARE TO BE 1/2"  $\phi$  x 1 1/4" A307 UNLESS NOTED.
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- 3) ALL DIMENSIONS ARE +/-.
- 4) MATCH SHOP MARK "X" IF SHOWN.
- 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
- 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
- 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.

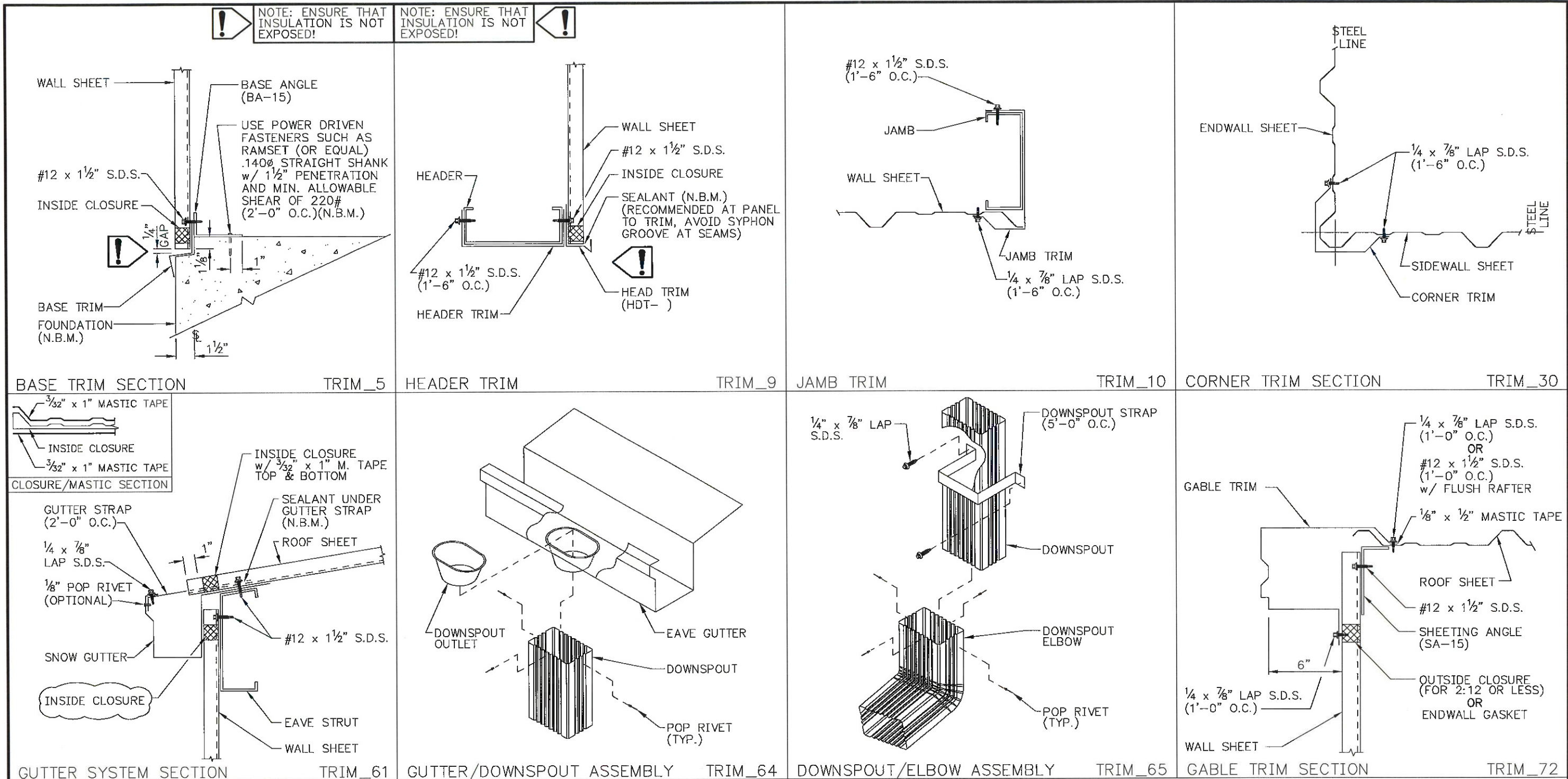


### Sunward Steel Buildings

BUYER: Marty McMullen  
 CUST.: Marty McMullen  
 SITE: Colorado Springs, CO  
 DESCR.: See Elevations  
 SCALE: NONE  
 P.O.: B33530

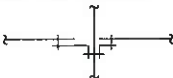
DRAWN BY: R2C  
 6/9/20  
 CHECK BY: \_\_\_\_\_  
 DES. ENG.: \_\_\_\_\_  
 SHEET NO. G3 OF 8





GENERAL NOTES:

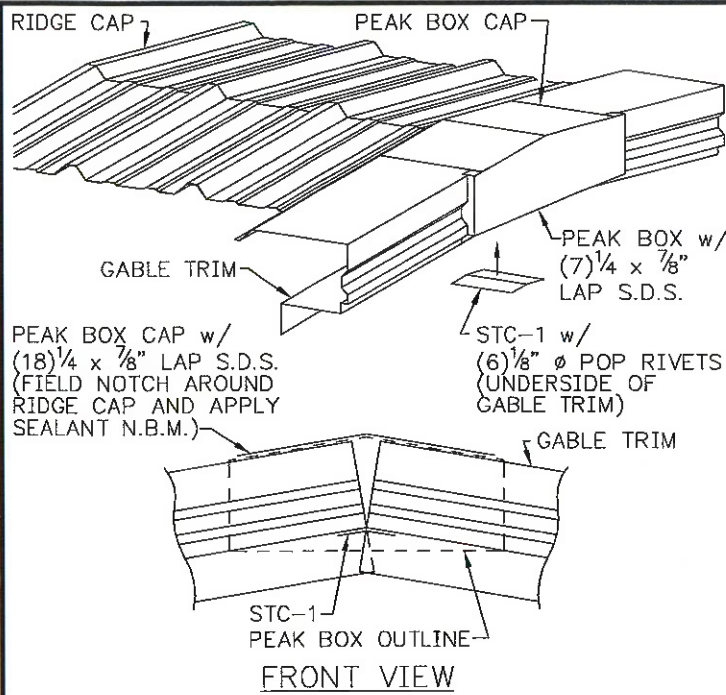
- 1) ALL BOLTS ARE TO BE 1/2"Ø x 1 1/4" A307 UNLESS NOTED.  
2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.  
3) ALL DIMENSIONS ARE +/-.  
4) MATCH SHOP MARK "⊗" IF SHOWN.  
5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.  
6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.  
7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



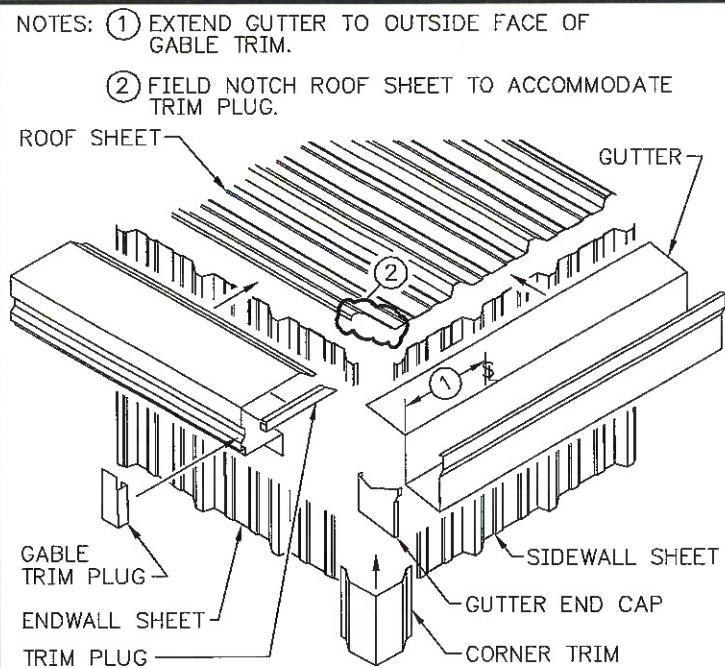
Sunward Steel Buildings

BUYER : Marty McMullen  
CUST. : Marty McMullen  
SITE : Colorado Springs, CO  
DESCR.: See Elevations  
SCALE : NONE  
P.O. : B33530

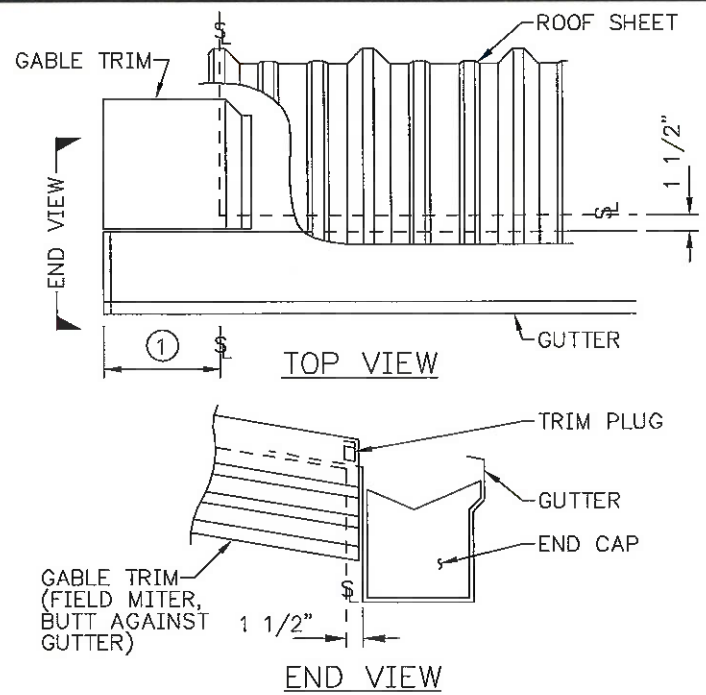
DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG.: \_\_\_\_\_  
SHEET NO. G4 OF 8



PEAK BOX TRIM\_76



CORNER DETAIL (TOP VIEW) TRIM\_84



CORNER DETAIL TRIM\_84A

### GENERAL NOTES:

- 1) ALL BOLTS ARE TO BE 1/2" Ø x 1 1/4" A307 UNLESS NOTED.
- 2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.
- 3) ALL DIMENSIONS ARE +/-.
- 4) MATCH SHOP MARK "X" IF SHOWN.
- 5) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.
- 6) SEE RIGID FRAME ELEVATION(S) FOR PURLIN AND GIRT ORIENTATION.
- 7) FRAMING CLIPS ARE TYPICALLY TOED DOWN UNLESS NOTED ON THE DRAWINGS.



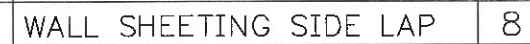
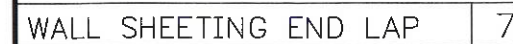
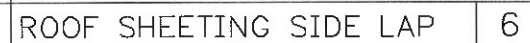
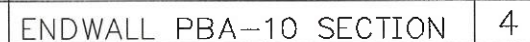
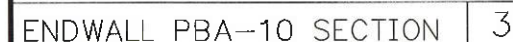
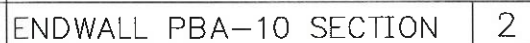
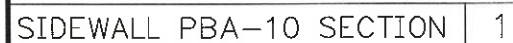
6/24/20

|                            |                   |
|----------------------------|-------------------|
| Sunward Steel Buildings    |                   |
| BUYER: Marty McMullen      | DRAWN BY: R2C     |
| CUST.: Marty McMullen      | 6/9/20            |
| SITE: Colorado Springs, CO | CHECK BY:         |
| DESCR.: See Elevations     | DES. ENG.:        |
| SCALE: NONE                |                   |
| P.O.: B33530               | SHEET NO. G5 OF 8 |

|                          | <table><tr><th>GIRT SIZE(S)</th><th>* DIM.</th></tr><tr><td>8" C or Z</td><td>2"</td></tr><tr><td>10" C or Z</td><td>3"</td></tr><tr><td>12" C or Z</td><td>4"</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                    |             | GIRT SIZE(S)    | * DIM.       | 8" C or Z | 2"                                                                                                                                                                                                                                                                                                                                                                                                | 10" C or Z | 3" | 12" C or Z | 4" |  |  |  |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|--------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|------------|----|--|--|--|
| GIRT SIZE(S)             | * DIM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
| 8" C or Z                | 2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
| 10" C or Z               | 3"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
| 12" C or Z               | 4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
|                          | SUBJAMB TO GIRT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2           | GIRT TO SUBJAMB | 3            | 4         |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
| WALKDOOR SUBJAMB TO GIRT | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | HEADER TRIM | 5               | SUBJAMB TRIM | 6         | 7                                                                                                                                                                                                                                                                                                                                                                                                 |            |    |            |    |  |  |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |
|                          | HEADER TO SUBJAMB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 9           |                 | 10           |           | 11                                                                                                                                                                                                                                                                                                                                                                                                |            |    |            |    |  |  |  |
|                          | <div><div>GENERAL NOTES:</div><div><div>1) ALL BOLTS ARE TO BE 1/2" x 1 1/4" A307 UNLESS NOTED.</div><div>2) VIEW IS FROM OUTSIDE OF THE BUILDING UNLESS NOTED.</div><div>3) ALL DIMENSIONS ARE +/-.</div><div>4) ENSURE THAT INSULATION IS NOT EXPOSED!</div><div>5) MATCH SHOP MARK "⊗" IF SHOWN.</div><div>6) SEE ELEVATIONS AND PLANS FOR MEMBER SIZE(S); THE DETAILS SHOWN MAY NOT INDICATE ACTUAL SIZE.</div></div><div><div>COLORADO REGISTERED</div><div>SALEM G. SALEM</div><div>31893</div><div>6/24/22</div><div>PROFESSIONAL ENGINEER</div></div></div> |             |                 |              |           | <div><div>△</div><div>△</div><div>△</div></div> <div>Sunward Steel Buildings</div> <div><div>BUYER: Marty McMullen</div><div>CUST.: Marty McMullen</div><div>SITE: Colorado Springs, CO</div><div>DESCR.: See Elevations</div><div>SCALE: NONE</div><div>P.O.: B33530</div></div> <div><div>DRAWN BY: R2C</div><div>CHECK BY: 6/9/20</div><div>DES. ENG.:</div><div>SHEET NO. G6 OF 8</div></div> |            |    |            |    |  |  |  |
| 8                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                 |              |           |                                                                                                                                                                                                                                                                                                                                                                                                   |            |    |            |    |  |  |  |







**NER APPLICATION AT EXTERIOR SHEETING**

SEE RIGID FRAME ELEVATION FOR GIRT AND PURLIN ORIENTATION.

1'-0"

1'-6"

ETC.

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

1'-6"

ETC.

ANGLE: PBA-10  
(1" x 1" x 16 GAGE)  
TO BE INSTALLED BEFORE  
APPLYING ROOF SHEETING.  
(SEE ROOF FRAMING PLAN  
FOR LOCATION)

#12 x 1 1/2" S.D.S.

1/4 x 7/8" LAP S.D.S.

1/4 x 7/8" LAP  
SELF DRILLING SCREW (S.D.S.)

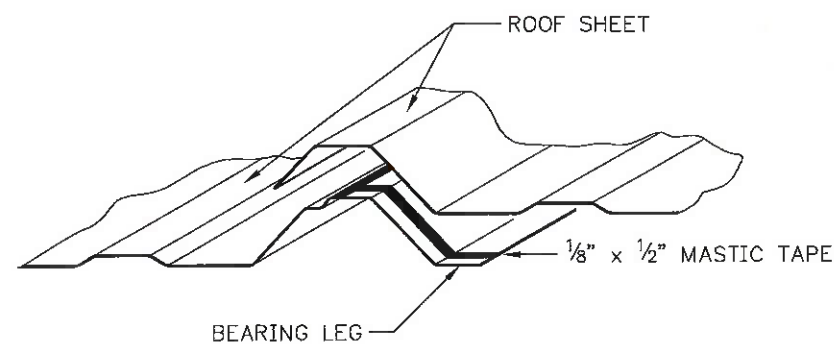
#12 x 1 1/2"  
SELF DRILLING SCREW (S.D.S.)

1/4 x 7/8" LAP S.D.S.  
(AT EACH HI-RIB  
OF RIDGE CAPS)

#12-24 x 1 1/4" S.D.S.  
TEK 5 w/o WASHER (GA)

WALL FASTENER SPACING AT HI-RIB SHEETING (HR)

ROOF FASTENER SPACING AT HI-RIB SHEETING (HR)



## 9

1) MORE THAN 6" OF FIBERGLASS INSULATION IS NOT RECOMMENDED BETWEEN THE GIRTS/PURLINS AND SHEETING.



DRAWN BY: R2C  
6/ 9/20  
CHECK BY: \_\_\_\_\_  
DES. ENG. : \_\_\_\_\_  
SHEET NO. G8 OF 8