

- 1.0 GENERAL NOTES
  - 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X.X]
  - 1.2 FOR PATENT INFO: <https://www.cs-pat.com>

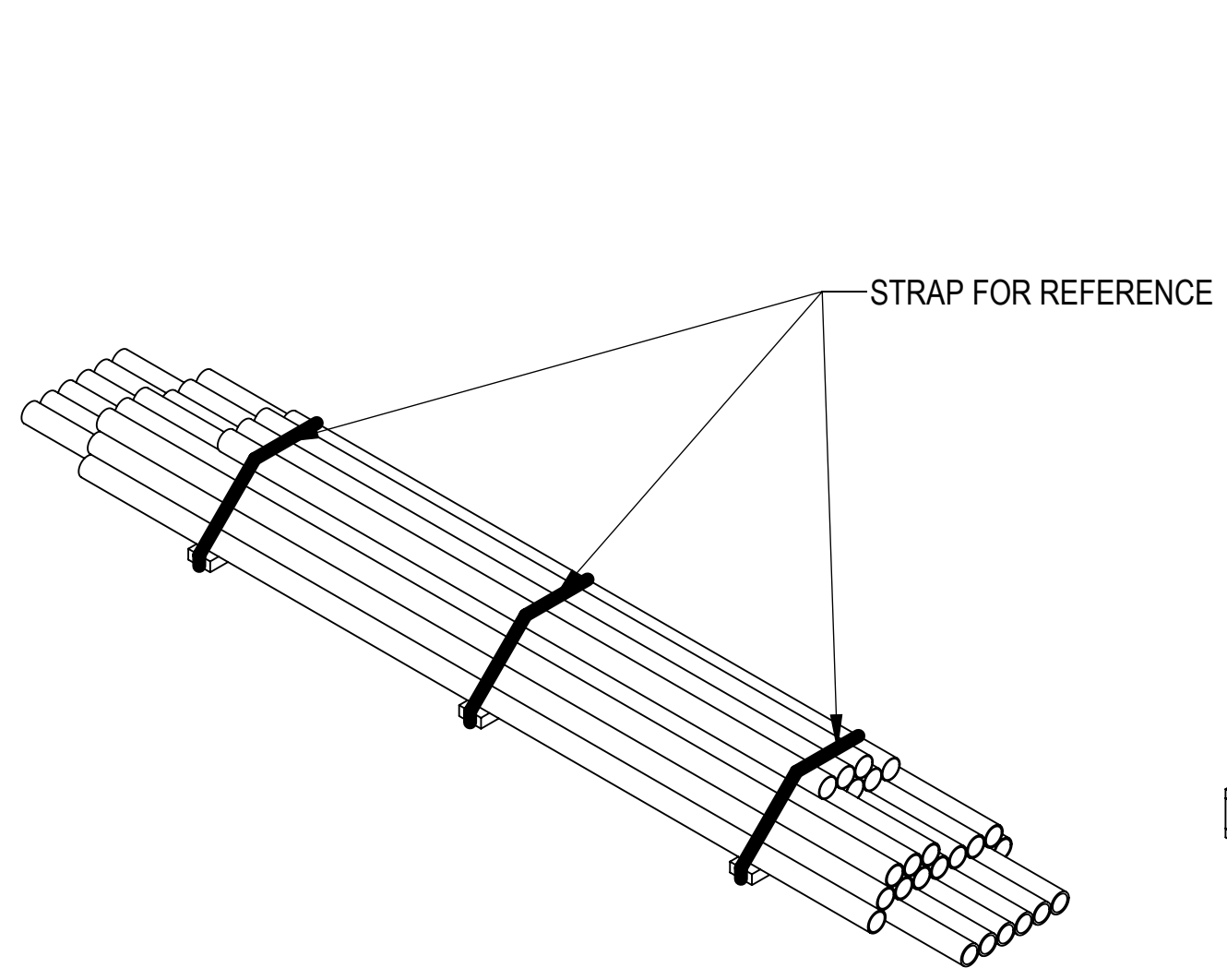
- 2.0 DESIGN NOTES
  - 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING THE APPURTENANCE. ADDITIONAL PRODUCTS MAY BE REQUIRED TO MAINTAIN THE INTEGRITY OF THE SAFETY CLIMB. DURING INSTALLATION, TEMPORARY AND/OR PERMANENT PRECAUTIONARY MEASURES SHOULD BE TAKEN TO PRESERVE THE CLIMBING FACILITY AND/OR SAFETY CLIMB.

- 2.2 FITS MONOPOLES 15" TO 50" OD.
- 2.3 MIN RECOMMENDED POLE THICKNESS 3/16"

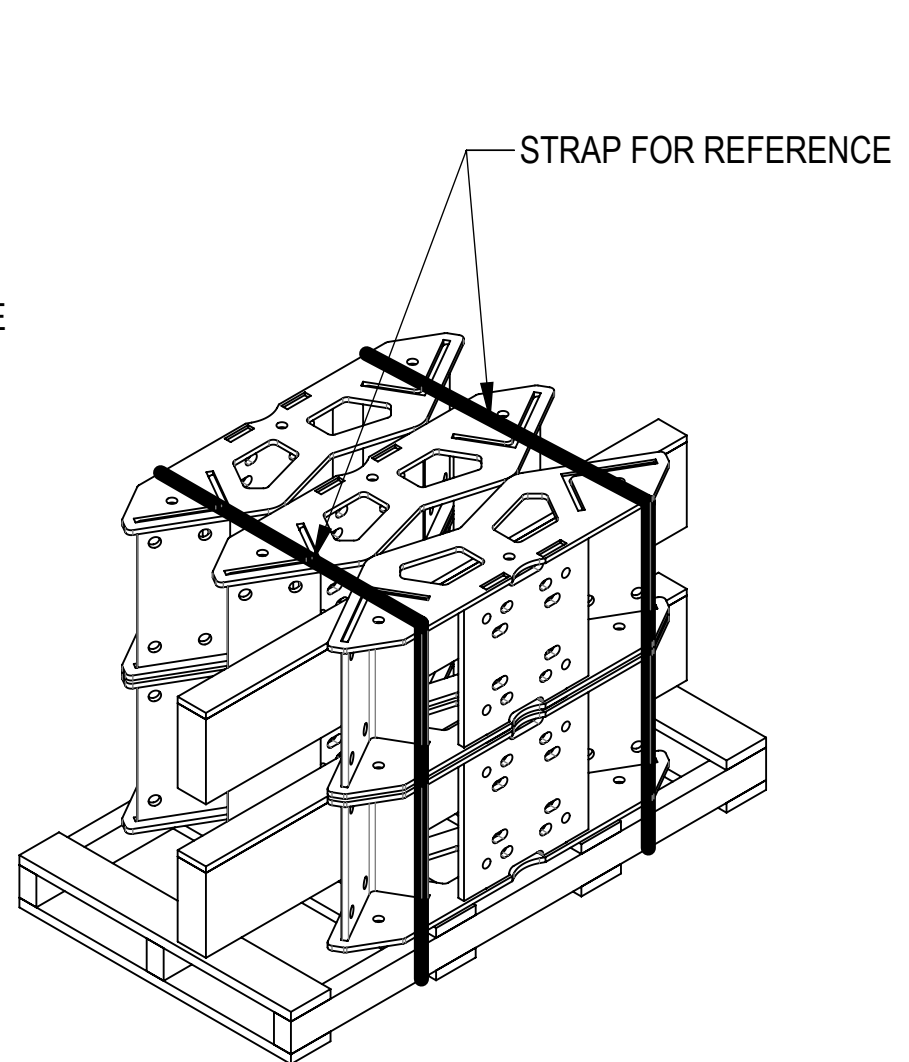
- 3.0 MANUFACTURING/SPECIAL REQUIREMENTS
  - 3.1 TIGHTEN ALL BOLTS SECURING FLAT PLATES BY THE TURN-OF-NUT METHOD. TIGHTEN ALL U-BOLTS USING TURN-OF-NUT METHOD WITH ATTENTION TO LEAVE EQUAL DISTANCE AND EQUAL FORCE ON EACH LEG OF THE U-BOLT.

- 4.0 TEST
- 5.0 PACKAGING
  - 5.1 PACKAGING SHALL MEET COMMSCOPE REQUIREMENTS PER DOCUMENT IS-PL-3005.
  - 5.2 PRINTED DOCUMENT TO BE PLACED INSIDE POLYBAG AND THEN IN SHIPPING CONTAINER.
  - 5.3 EXTRA HARDWARE MAY BE SUPPLIED, BAGGED AND SHIPPED.

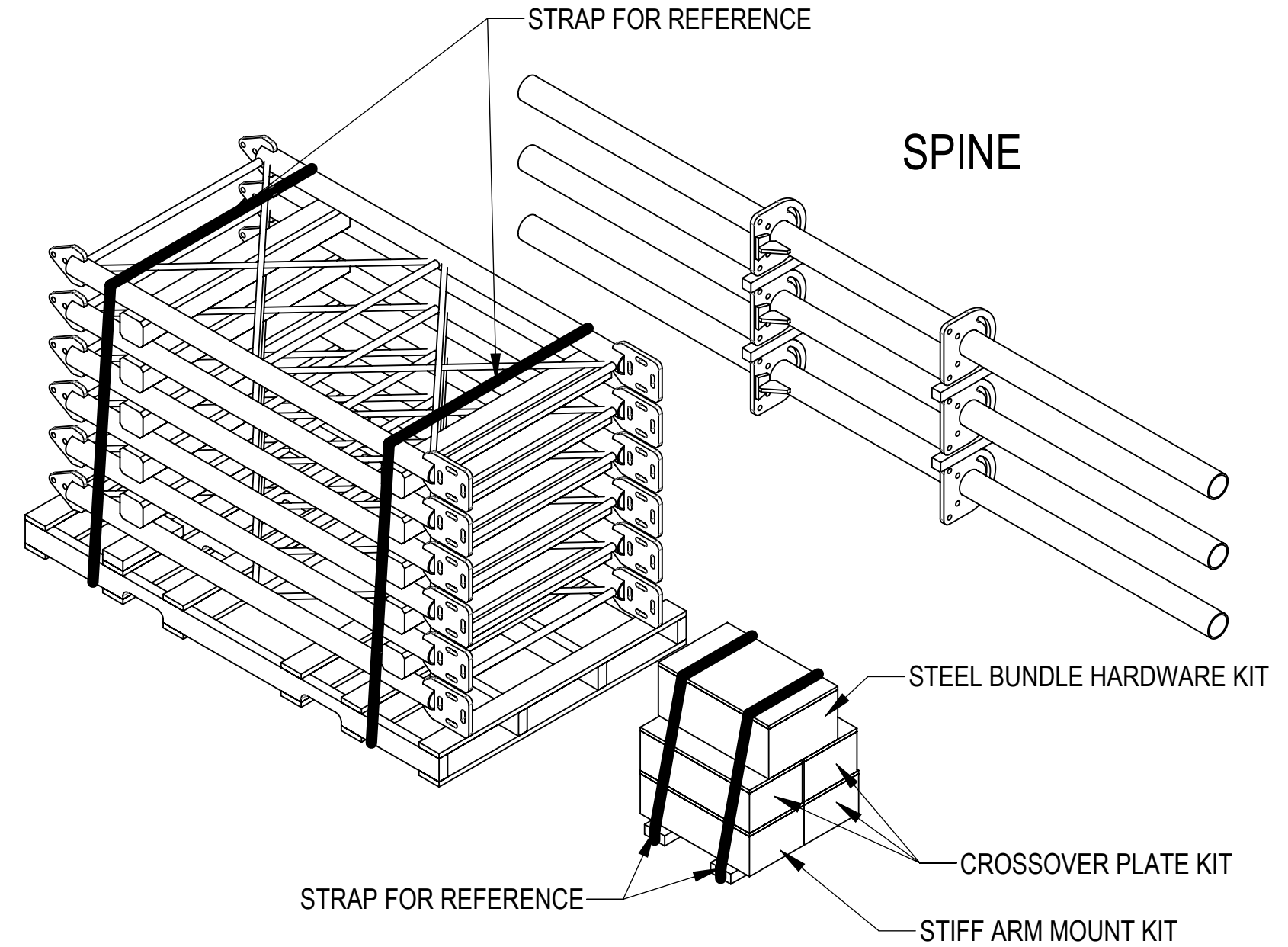
| REVISIONS |   |                   |                       |
|-----------|---|-------------------|-----------------------|
| REV.      | DESCRIPTION   | DATE              | APPROVED              |
| A         | INITIAL RELEASE   | RY1002<br>21NOV23 | YC1015<br>40183018CMO |
| B         | ADDED MCG23RHDXL-11MB, MCG23RHDXL-11M996, MCG23RHDXL-11M9126, MCG23RHDXL-13MB, MCG23RHDXL-13M1296, MCG23RHDXL13M12126, MCG23RHDXL-15MB, MCG23RHDXL-15M1596, MCG23RHDXL15M15126, MCG23RHDXL-15M1296 AND MCG23RHDXL15M12126 TO SERIES | RY1002<br>11DEC23 | YC1015<br>40182550CMO |
| C         | UPDATED EPA DATA  | RY1002<br>18JAN24 | YC1015<br>40187155CMO |



PIPE BUNDLE



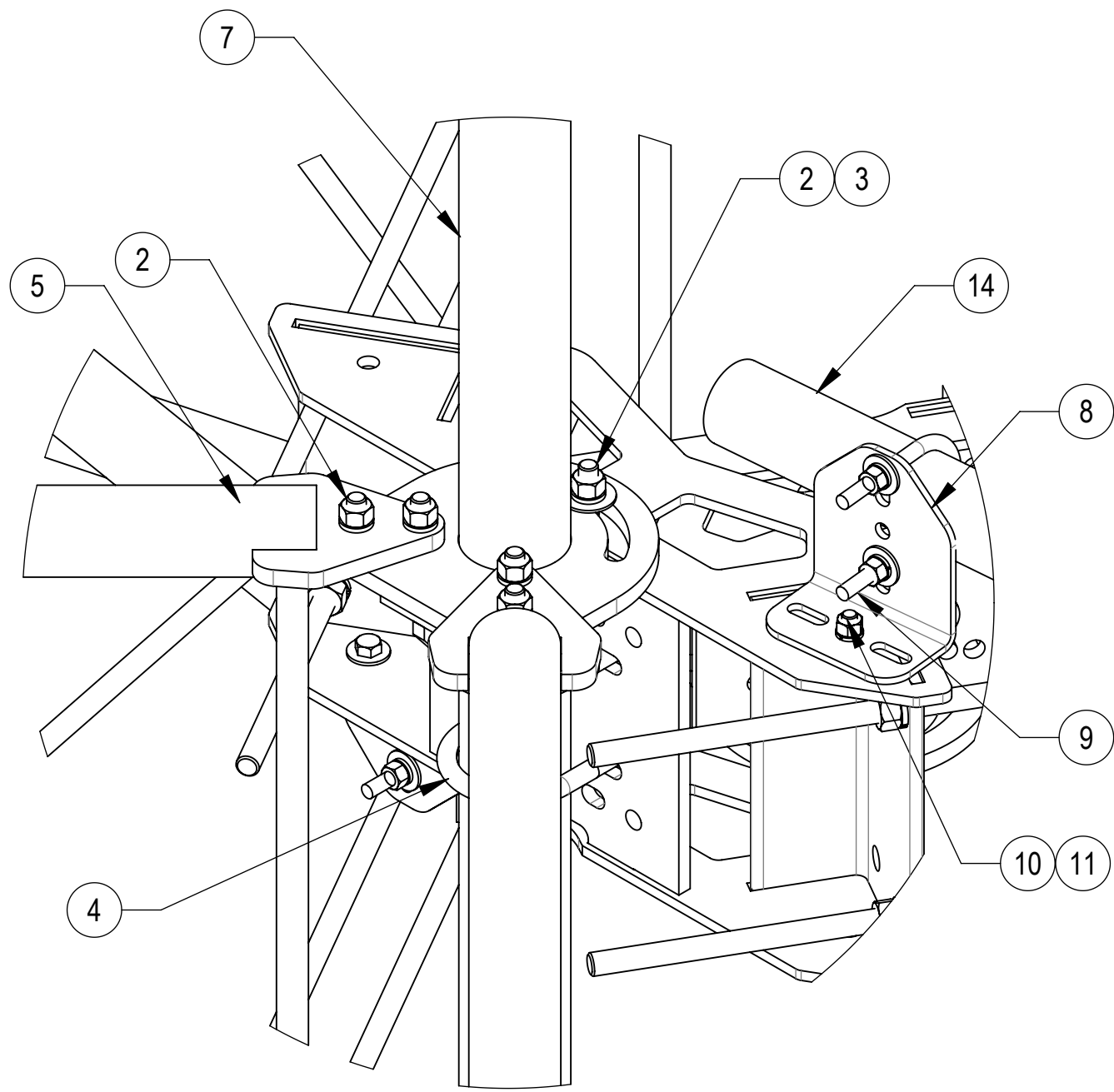
RING MOUNT



STEEL BUNDLE

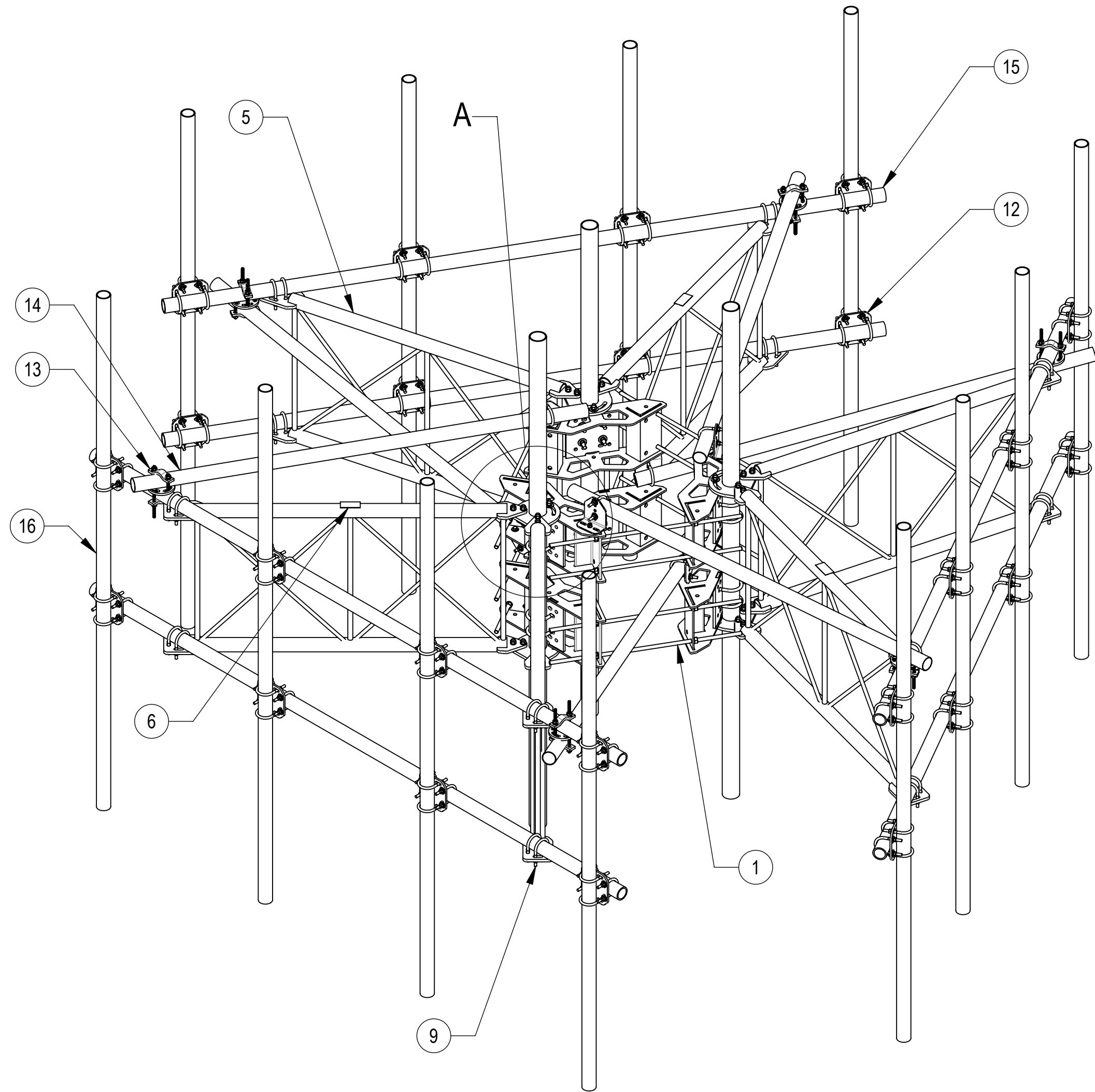
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| COMMSCOPE, INC. OF NORTH CAROLINA   |  |                     |                              |        |  |                     |  |            |  |                                |  |              |  |
| TOLERANCES  |  |                     |                              |        |  | SAP MATERIAL MASTER |  |            |  |                                |  |              |  |
| 1 PLACE .X[X] ± 0.2[6.3]  |  |                     | 3 PLACE .XXX[X] ± 0.060[1.5] |        |  | SEE TABLE 1         |  |            |  |                                |  |              |  |
| 2 PLACE .XX[X] ± 0.12[3.0]  |  |                     | ANGLES ± 2°                  |        |  |                     |  |            |  |                                |  |              |  |
| FINISH  |  |                     |                              |        |  | MATERIAL            |  |            |  |                                |  |              |  |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET PER ANSI Y 14.5M-1994 |  |                     |                              |        |  | NAME                |  | DATE       |  | TITLE                          |  |              |  |
|   |  |                     |                              |        |  | CE RY1002           |  | 06NOV23    |  | MCG23RHDXL SECTOR FRAME SERIES |  |              |  |
|   |  |                     |                              |        |  | RW RY1002           |  | 01/18/2024 |  |                                |  |              |  |
|   |  |                     |                              |        |  | AD YC1015           |  | 01/18/2024 |  | SCALE                          |  | DOCUMENT NO. |  |
|   |  |                     |                              |        |  | RE YMENG            |  | 01/18/2024 |  | 1:18                           |  | MCG23RHDXL   |  |
| ECN 40187155CMO   |  |                     |                              |        |  |                     |  |            |  |                                |  |              |  |
| DENSITY   |  | lbs/in <sup>3</sup> |                              | MASS   |  | lbs                 |  | VOLUME     |  | in <sup>3</sup>                |  |              |  |
| SURFACE AREA  |  | in <sup>2</sup>     |                              | HEIGHT |  |                     |  | LENGTH     |  |                                |  |              |  |
| WIDTH   |  |                     |                              |        |  |                     |  |            |  |                                |  |              |  |
| SIZE  |  | Auth Group          |                              | INSL   |  | MODEL               |  | DRAWING    |  |                                |  |              |  |
| C   |  | ⊕                   |                              | ◁      |  | VERSION             |  | STATUS     |  | REVISION                       |  |              |  |
|   |  |                     |                              |        |  | 01                  |  | RE         |  | B                              |  |              |  |
|   |  |                     |                              |        |  |                     |  | 02         |  | RE                             |  |              |  |
|   |  |                     |                              |        |  |                     |  |            |  | C                              |  |              |  |
|   |  |                     |                              |        |  |                     |  |            |  | SHEET                          |  |              |  |
|   |  |                     |                              |        |  |                     |  |            |  | 1 OF 9                         |  |              |  |





**DETAIL A**  
SCALE 1 : 5

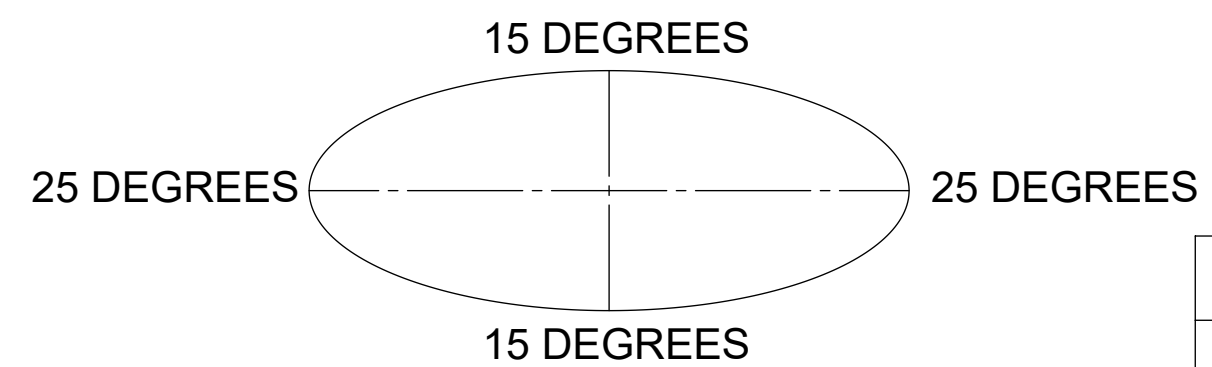
MCG23RHDXL12M12126 SHOWN FOR REFERENCE  
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE)



COMPONENT PART NUMBERS PROVIDED FOR ASSEMBLY PURPOSES;  
INDIVIDUAL COMPONENTS MAY BE SHIPPED AS PARTS WITHIN AN INCLUDED KIT.

| ITEM | PART NO.    | DESCRIPTION                              | QTY. | WEIGHT     | NOTE NO.                                |
|------|-------------|--|------|------------|---|
| 1    | MC-RM1550-3 | 15" - 50" OD RINGMOUNT                   | 2    | 229.90 LBS |   |
| 2    | GB-05225    | 5/8" X 2-1/4" GALV BOLT KIT              | 30   | 0.28 LBS   |   |
| 3    | GWF-05      | 5/8" GALV FLAT WASHER, 1.7OD             | 6    | 0.06 LBS   |   |
| 4    | GUB-53560   | 5/8" X 3-5/8" X 6" GALV U-BOLT           | 12   | 1.30 LBS   |   |
| 5    | SFG23180-00 | ARM, STANDOFF, SFG23                     | 6    | 120.07 LBS |   |
| 6    | SFG23100    | LABEL, SFG23RHDXL                        | 3    | 0.04 LBS   |   |
| 7    | SFG2204     | WELDMENT, BACK VERTICAL ARM MOUNT        | 3    | 97.29 LBS  |   |
| 8    | XAU01       | ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD | 6    | 2.98 LBS   |   |
| 9    | GUB-4352    | 1/2" X 3" X 5-1/4" GALV U-BOLT           | 30   | 0.71 LBS   |   |
| 10   | GB-04145    | 1/2" X 1-1/2" GALV BOLT KIT              | 6    | 0.13 LBS   |   |
| 11   | GWF-04      | 1/2" GALV FLAT WASHER                    | 6    | 0.04 LBS   |   |
| 12   | XP-2525     | CROSSOVER PLATE KIT, 2-7/8 OD X 2-7/8 OD | 24   | 8.37 LBS   | QTY SEE INDIVIDUAL DRAWING              |
| 13   | XP-R        | CROSSOVER PLATE, ROUND, UP TO 3.5" OD    | 6    | 6.20 LBS   |   |
| 14   | MT54696120  | PIPE, 2.875"OD X 96"                     | 6    | 28.35 LBS  |   |
| 15   | MT546150276 | PIPE, 2.875"OD X 150"                    | 6    | 96.11 LBS  | PART NO. SEE INDIVIDUAL DRAWING         |
| 16   | MT-546-126  | PIPE, 2.875"OD X 126"                    | 12   | 61.05 LBS  | PART NO. AND QTY SEE INDIVIDUAL DRAWING |

**ALLOWABLE TIEBACK ANGLE**  
+15 DEGREES VERTICAL  
±25 DEGREES HORIZONTAL



|   |                      |                                   |        |                 |
|---|----------------------|-----------------------------------|--------|-----------------|
| COMMSCOPE, INC. OF NORTH CAROLINA       |                      |                                   |        |                 |
| TITLE<br>MCG23RHDXL SECTOR FRAME SERIES |                      |                                   |        |                 |
| SIZE<br><b>C</b>                        | SCALE<br><b>1:20</b> | DOCUMENT NO.<br><b>MCG23RHDXL</b> |        |                 |
| DRAWING                                 |                      | VERSION                           | STATUS | REVISION        |
|   |                      | 02                                | RE     | C               |
|   |                      |                                   |        | SHEET<br>3 OF 9 |

4

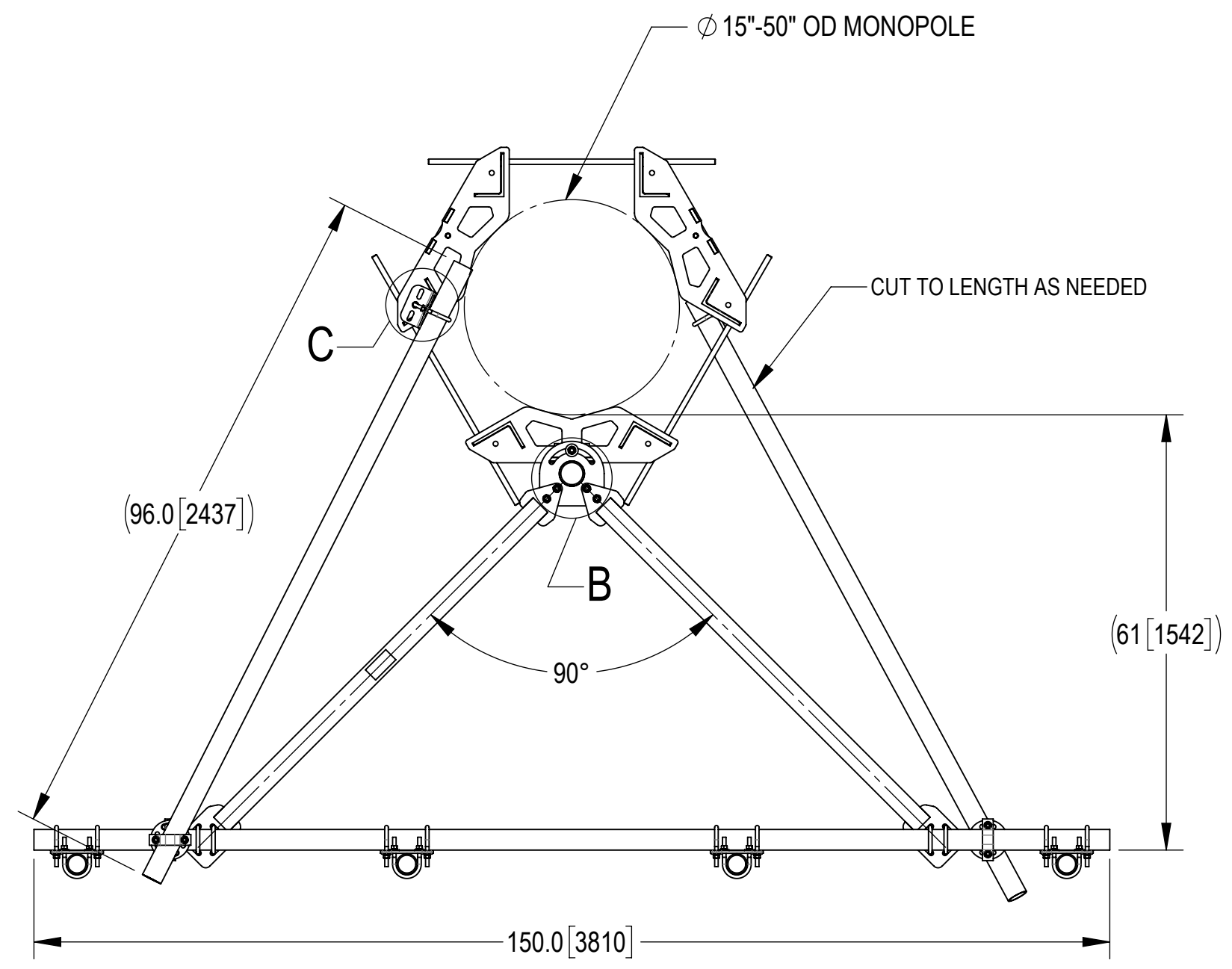
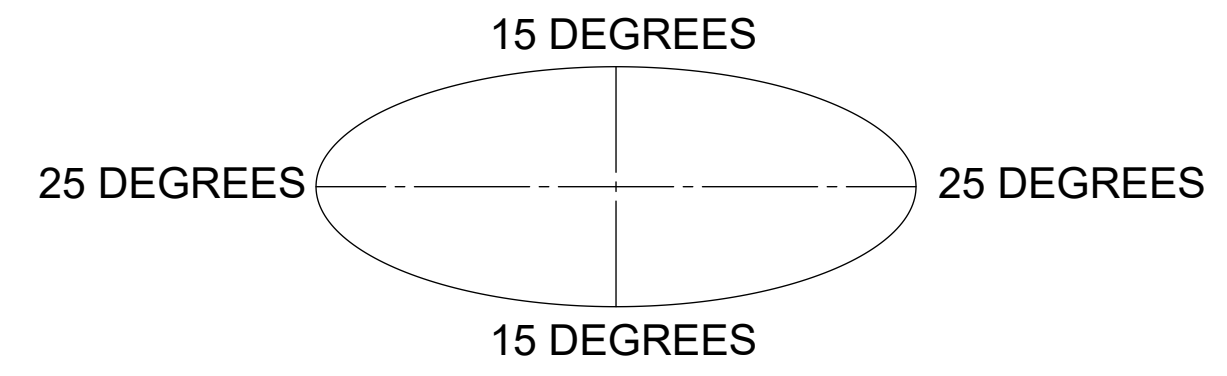
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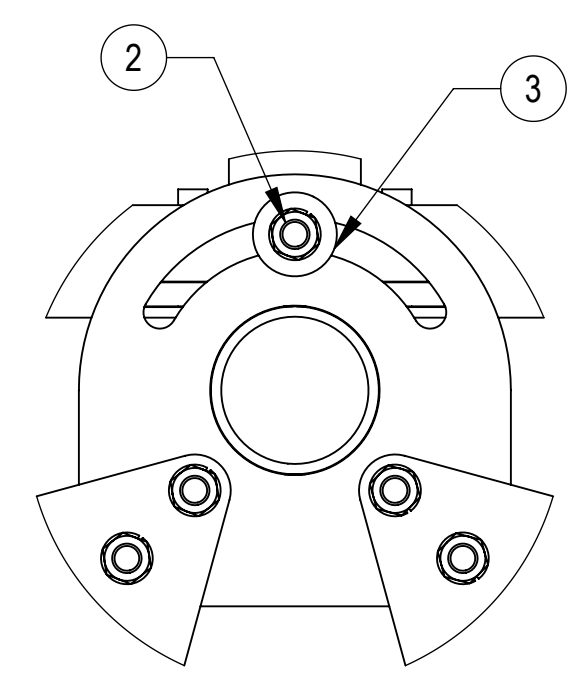
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### ALLOWABLE TIEBACK ANGLE

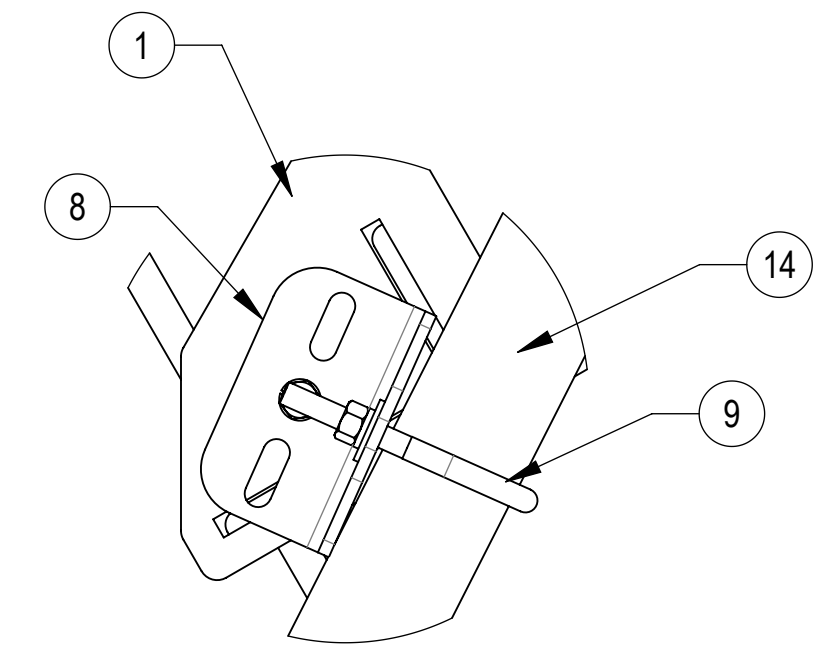
±15 DEGREES VERTICAL  
±25 DEGREES HORIZONTAL



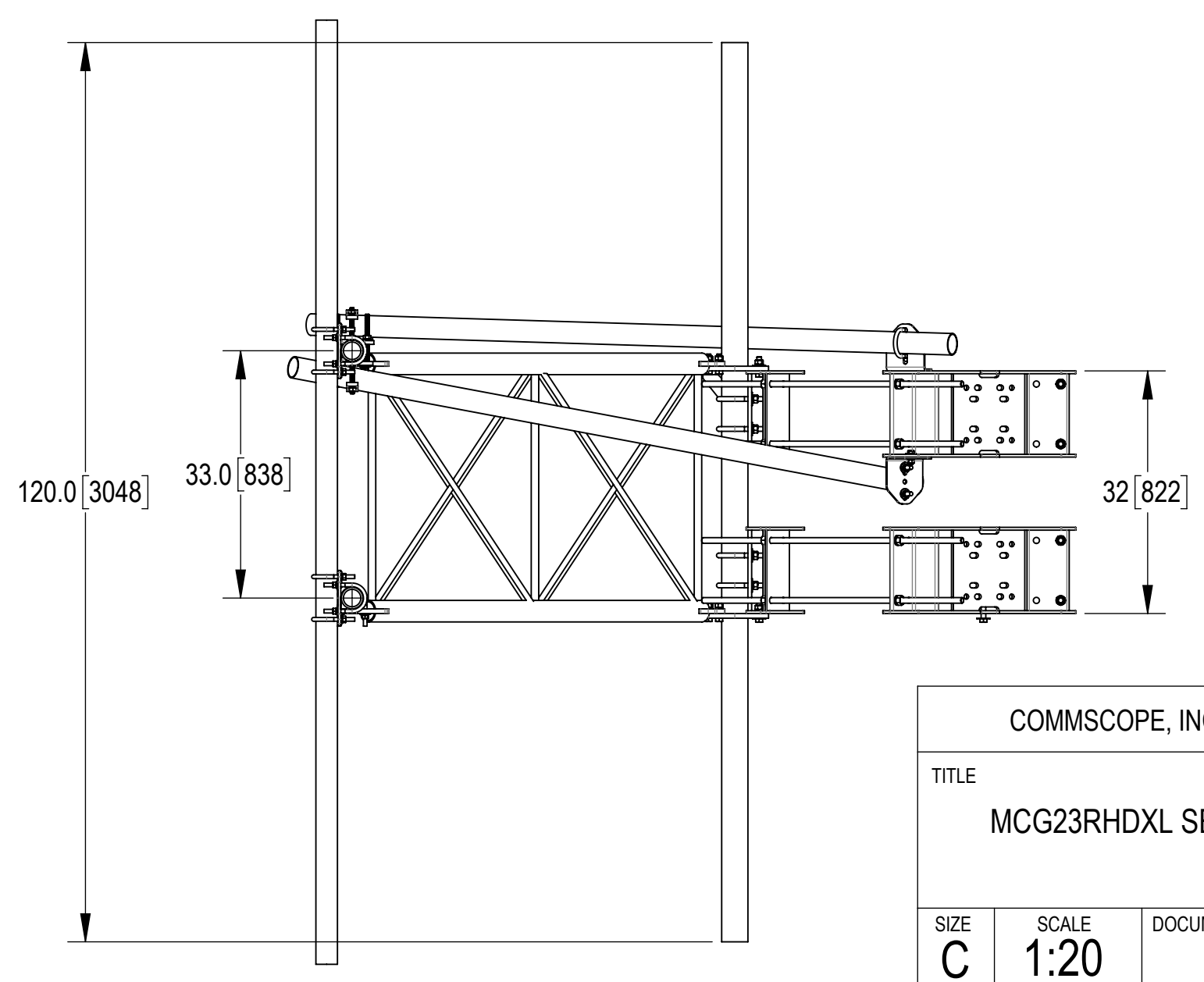
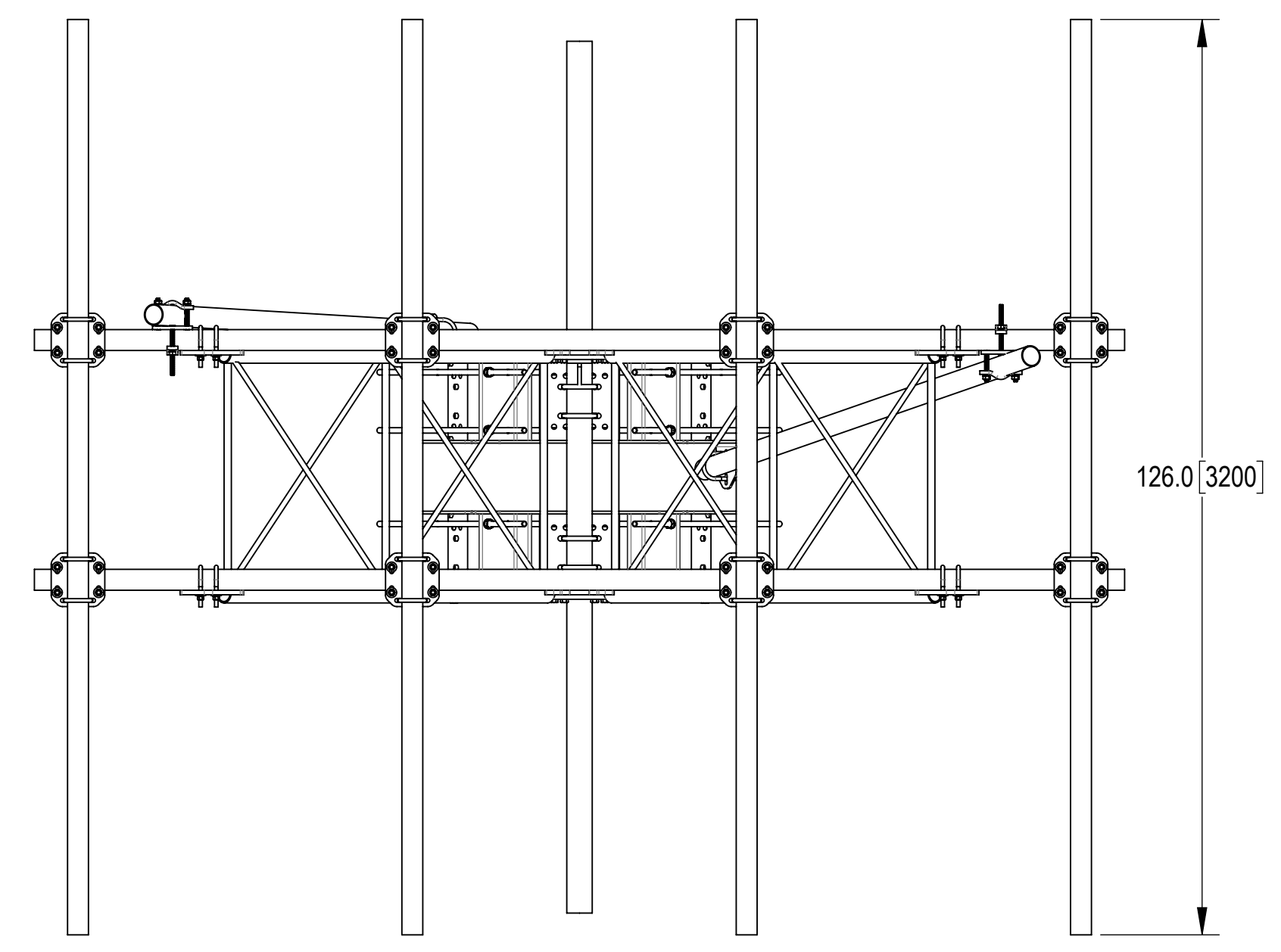
MCG23RHDXL12M12126 SHOWN FOR REFERENCE  
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE ON SHEET 3)



DETAIL B  
SCALE 1 : 4



DETAIL C  
SCALE 1 : 4



|   |               |                            |        |          |
|---|---------------|----------------------------|--------|----------|
| COMMSCOPE, INC. OF NORTH CAROLINA       |               |                            |        |          |
| TITLE<br>MCG23RHDXL SECTOR FRAME SERIES |               |                            |        |          |
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|   |               | DRAWING                    |        | SHEET    |
|   |               | VERSION                    | STATUS | REVISION |
|   |               | 02                         | RE     | C        |
|   |               |                            |        | 4 OF 9   |

4

3

2

1

D

D

C

C

B

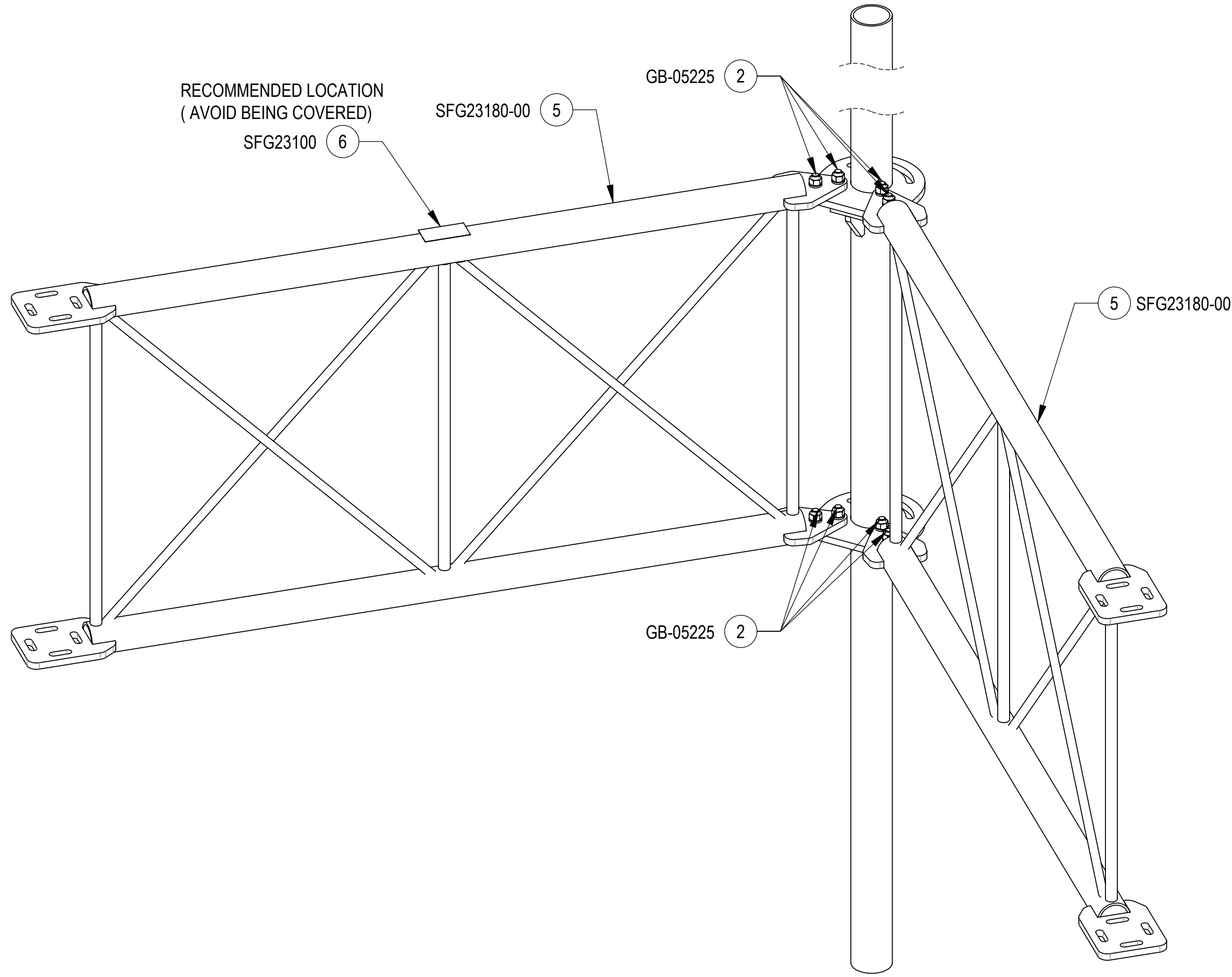
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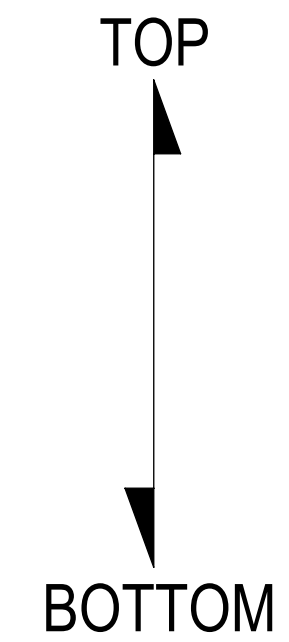
A

INSTALLATION SEQUENCE - REFERENCE ONLY

STEP 1: ATTACH STANDOFF ARMS (SFG23180-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING (GB-05225) BOLT KITS  
 ATTACH LABEL (SFG23100) ON TOP OF STANDOFF ARMS(SFG23180-00) . (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER BEFORE APPLYING LABEL.)

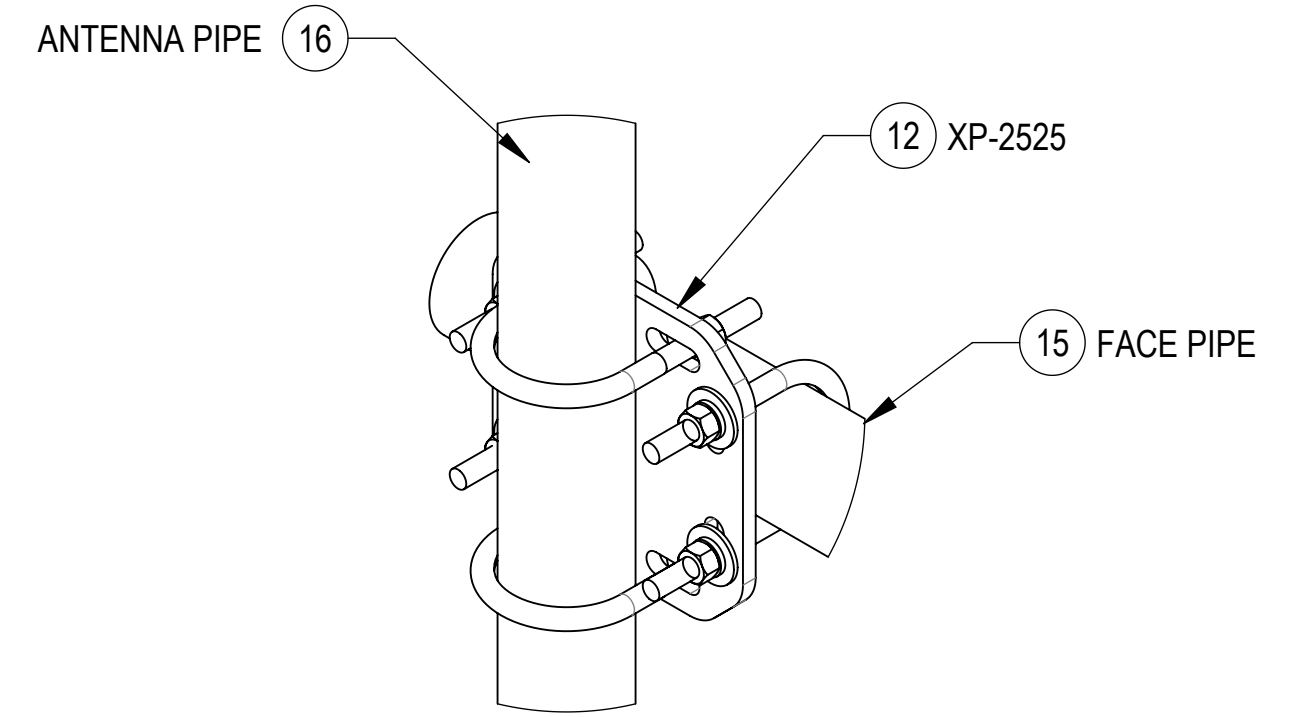
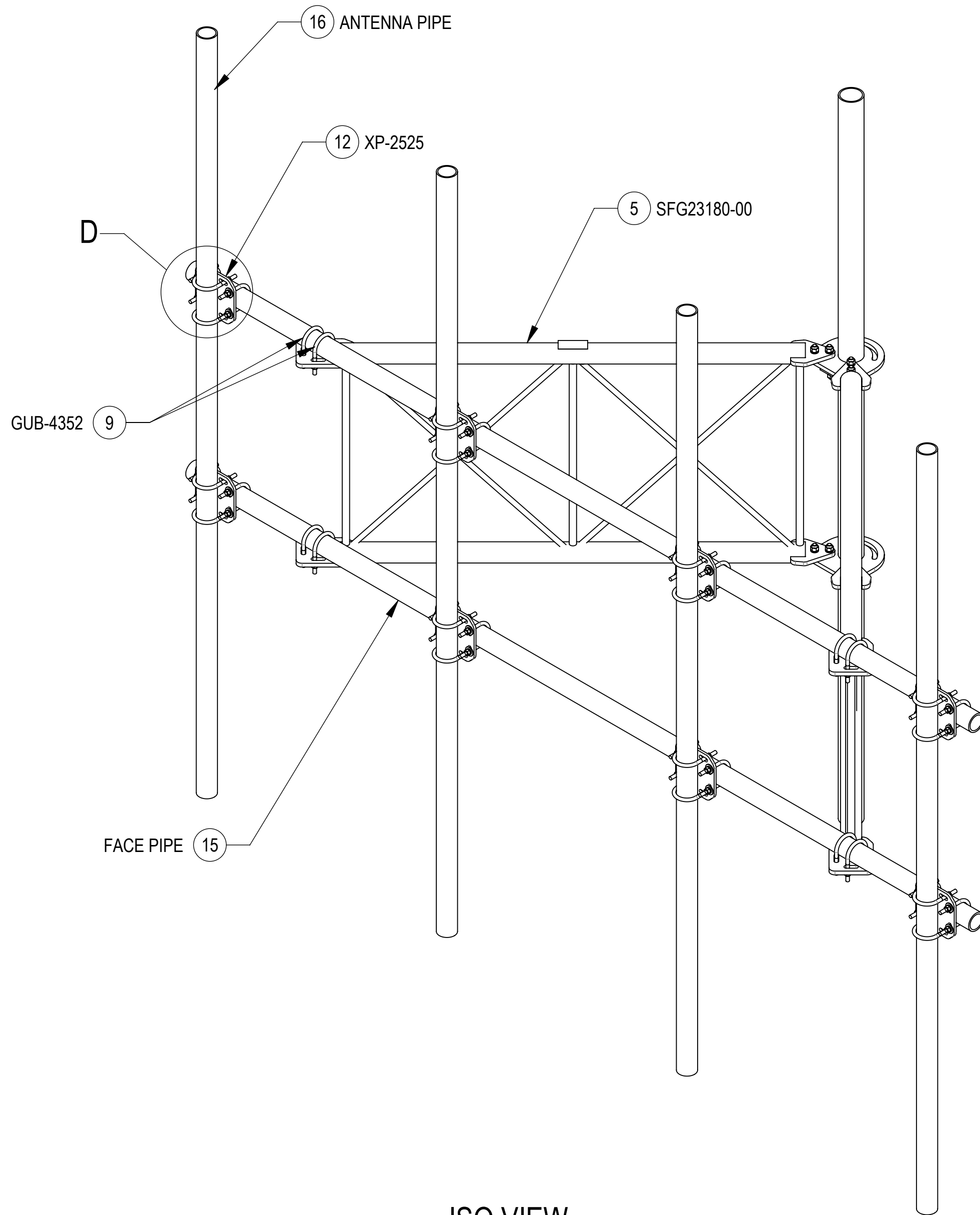


ISO VIEW

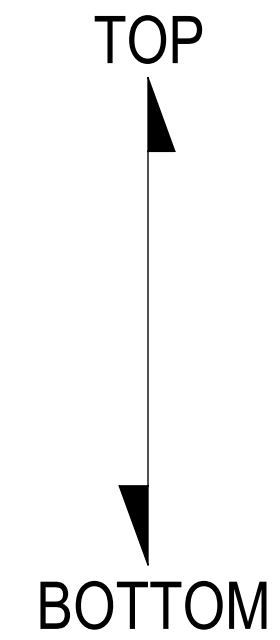


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| COMMSCOPE, INC. OF NORTH CAROLINA       |               |                            |              |                 |
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| SIZE<br>C                               | SCALE<br>1:10 | DOCUMENT NO.<br>MCG23RHDXL |              |                 |
|   |               | DRAWING                    |              | SHEET<br>5 OF 9 |
|   |               | VERSION<br>02              | STATUS<br>RE |                 |

STEP 2: ATTACH FACE PIPES TO STANDOFF ARMS (SFG23180-00) USING U-BOLTS (GUB-4352)  
AND THEN ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER PLATE KITS (XP-2525).



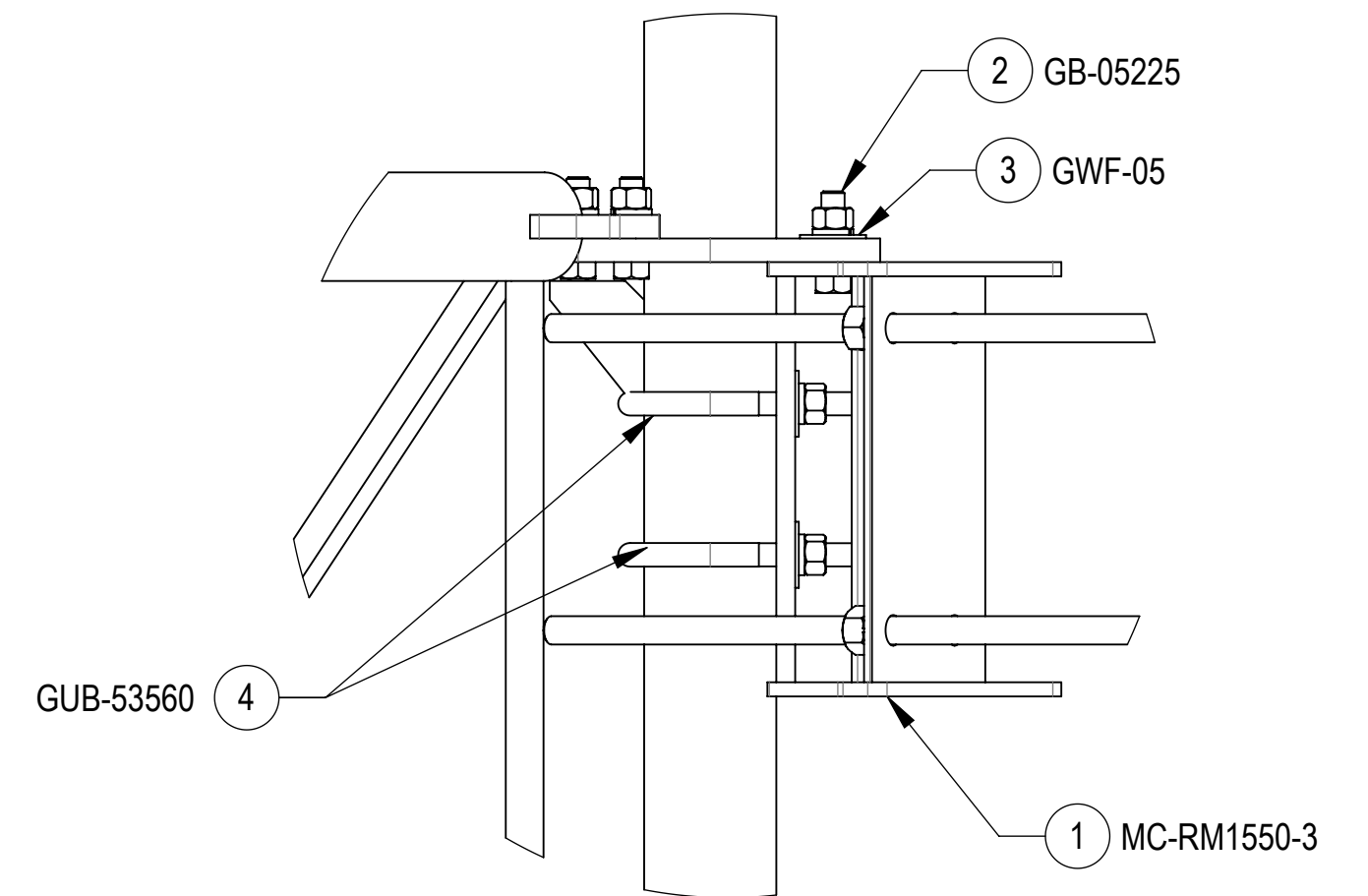
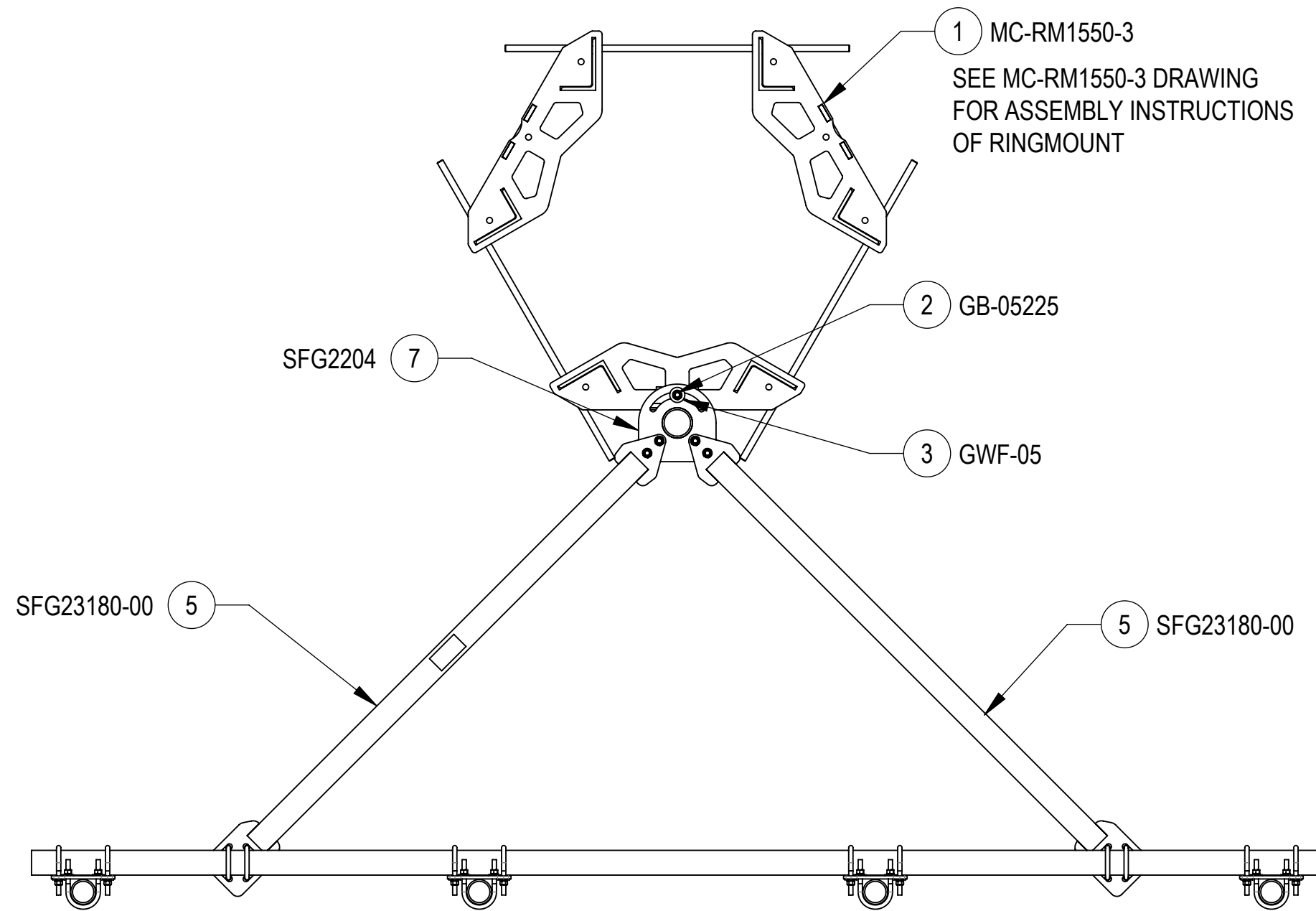
DETAIL D  
SCALE 1 : 4



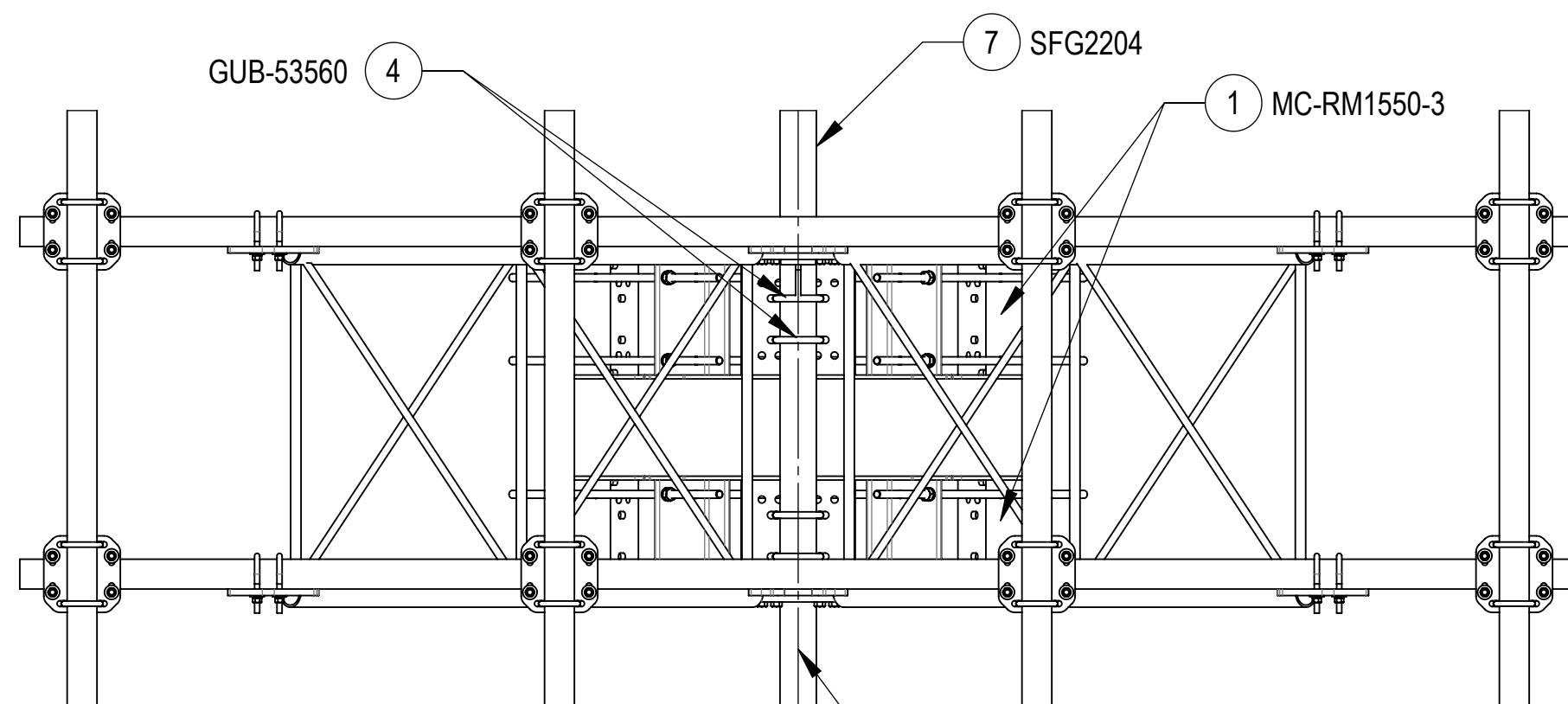
ISO VIEW

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| COMMSCOPE, INC. OF NORTH CAROLINA       |               |                            |              |                 |
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| SIZE<br>C                               | SCALE<br>1:13 | DOCUMENT NO.<br>MCG23RHDXL |              |                 |
|   |               | DRAWING                    |              | SHEET<br>6 OF 9 |
|   |               | VERSION<br>02              | STATUS<br>RE |                 |

STEP 3: ATTACH BACK VERTICAL ARM MOUNT (SFG2204) TO RINGMOUNT (MC-RM1550-3) USING BOLT KITS (GB-05225), FLAT WASHERS (GWF-05) AND U-BOLTS (GUB-53560)



SIDE CROP VIEW



RINGMOUNT SECTOR CENTERLINES MUST VERTICALLY ALIGN TO ALLOW SECTOR FRAME SPINE PROPER MOUNTING

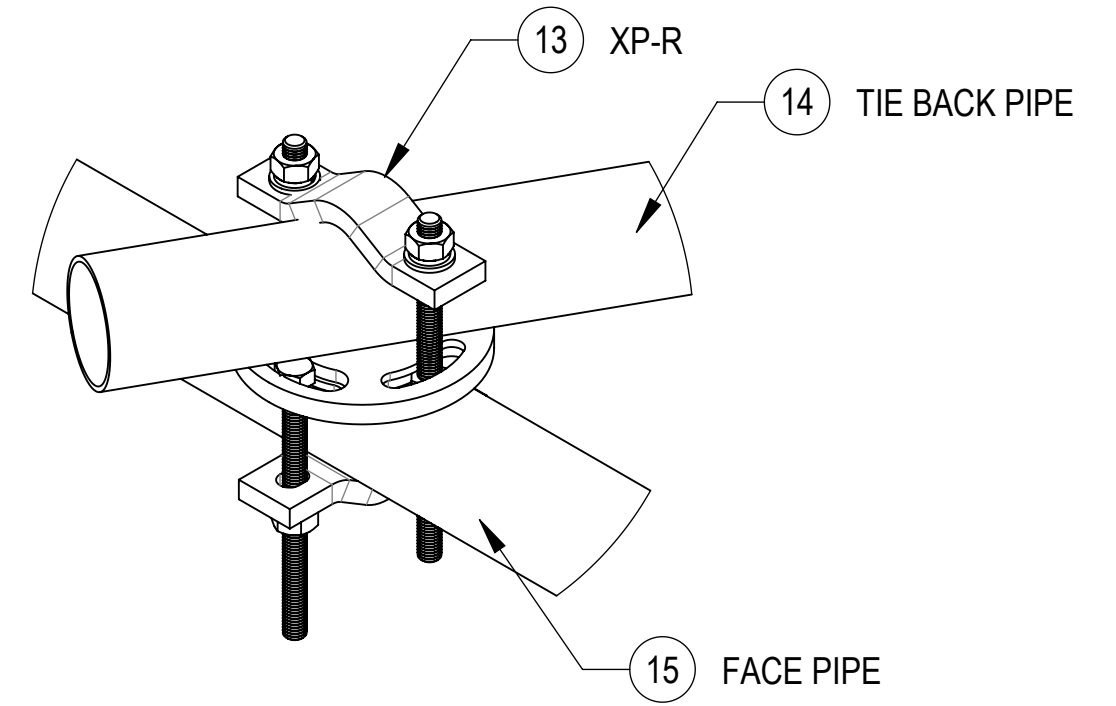
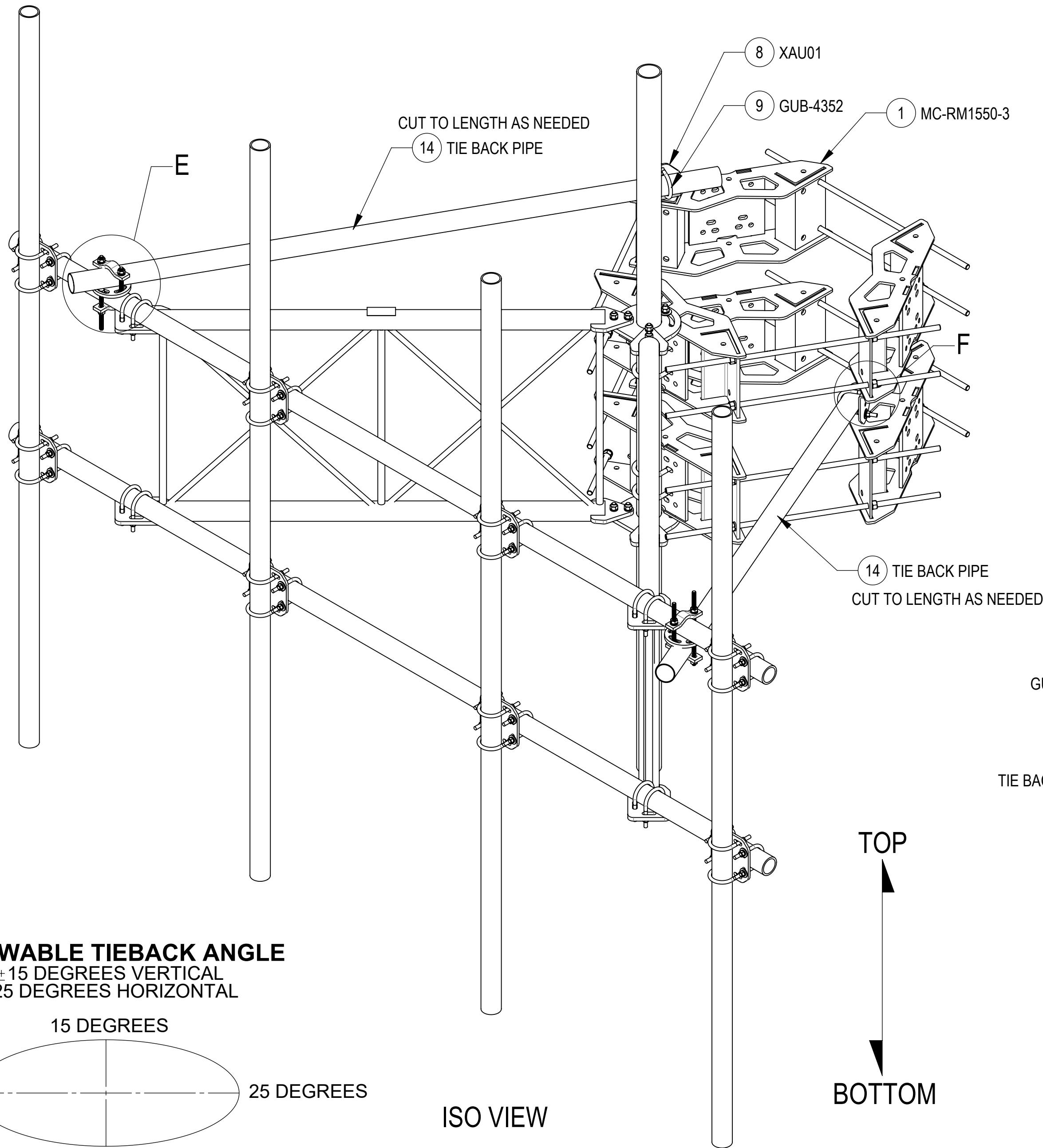
TOP  
↓  
BOTTOM

|   |               |                            |        |          |
|---|---------------|----------------------------|--------|----------|
| COMMSCOPE, INC. OF NORTH CAROLINA       |               |                            |        |          |
| TITLE<br>MCG23RHDXL SECTOR FRAME SERIES |               |                            |        |          |
| SIZE<br>C                               | SCALE<br>1:10 | DOCUMENT NO.<br>MCG23RHDXL |        |          |
|   |               | DRAWING                    |        | SHEET    |
|   |               | VERSION                    | STATUS | REVISION |
|   |               | 02                         | RE     | C        |
|   |               |                            |        | 7 OF 9   |

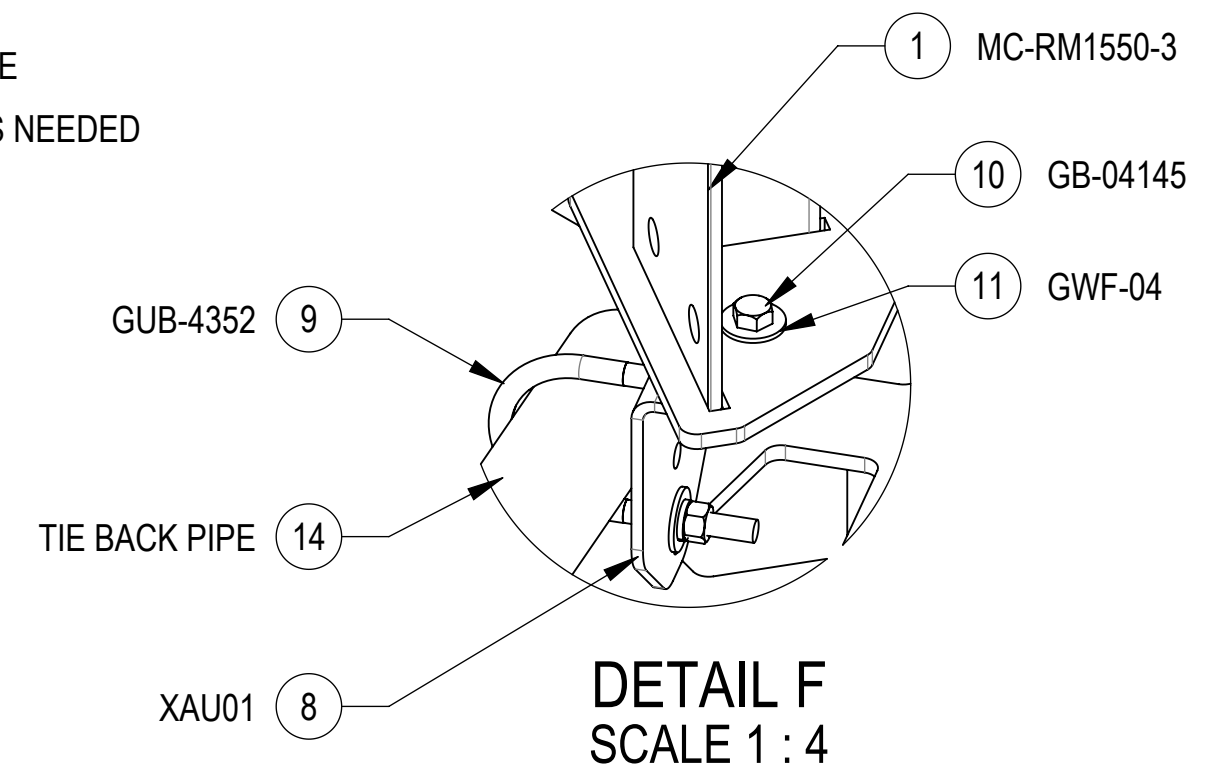


STEP 4: ATTACH TIE BACK PIPES TO FACE PIPES USING XP-R

STEP 5: ATTACH TIE BACK PIPES TO RINGMOUNT (MC-RM1550-3) USING CROSSOVER ANGLES (XAU01), BOLT KITS (GB-04145), FLAT WASHERS (GWF-04) AND U-BOLTS (GUB-4352)

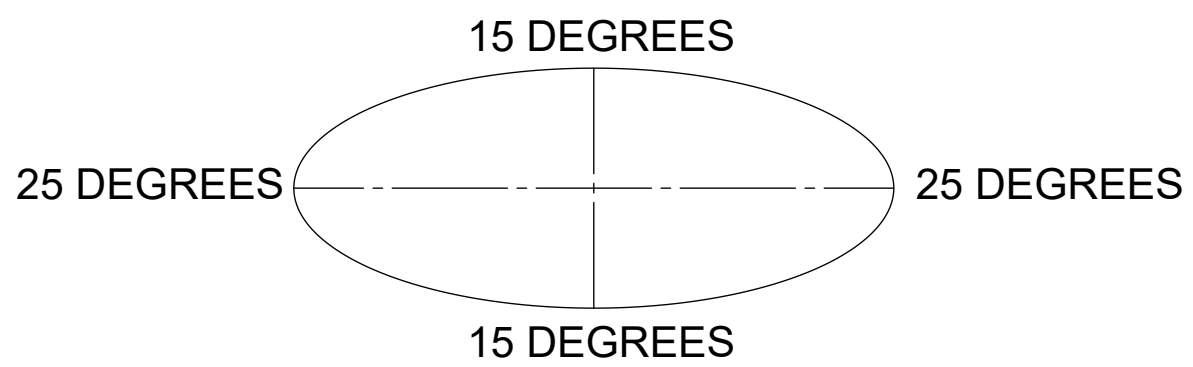


DETAIL E  
SCALE 1 : 4

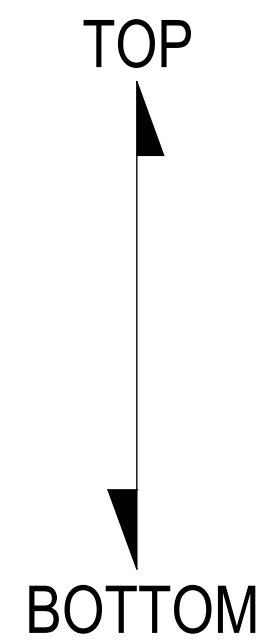


DETAIL F  
SCALE 1 : 4

**ALLOWABLE TIEBACK ANGLE**  
±15 DEGREES VERTICAL  
±25 DEGREES HORIZONTAL



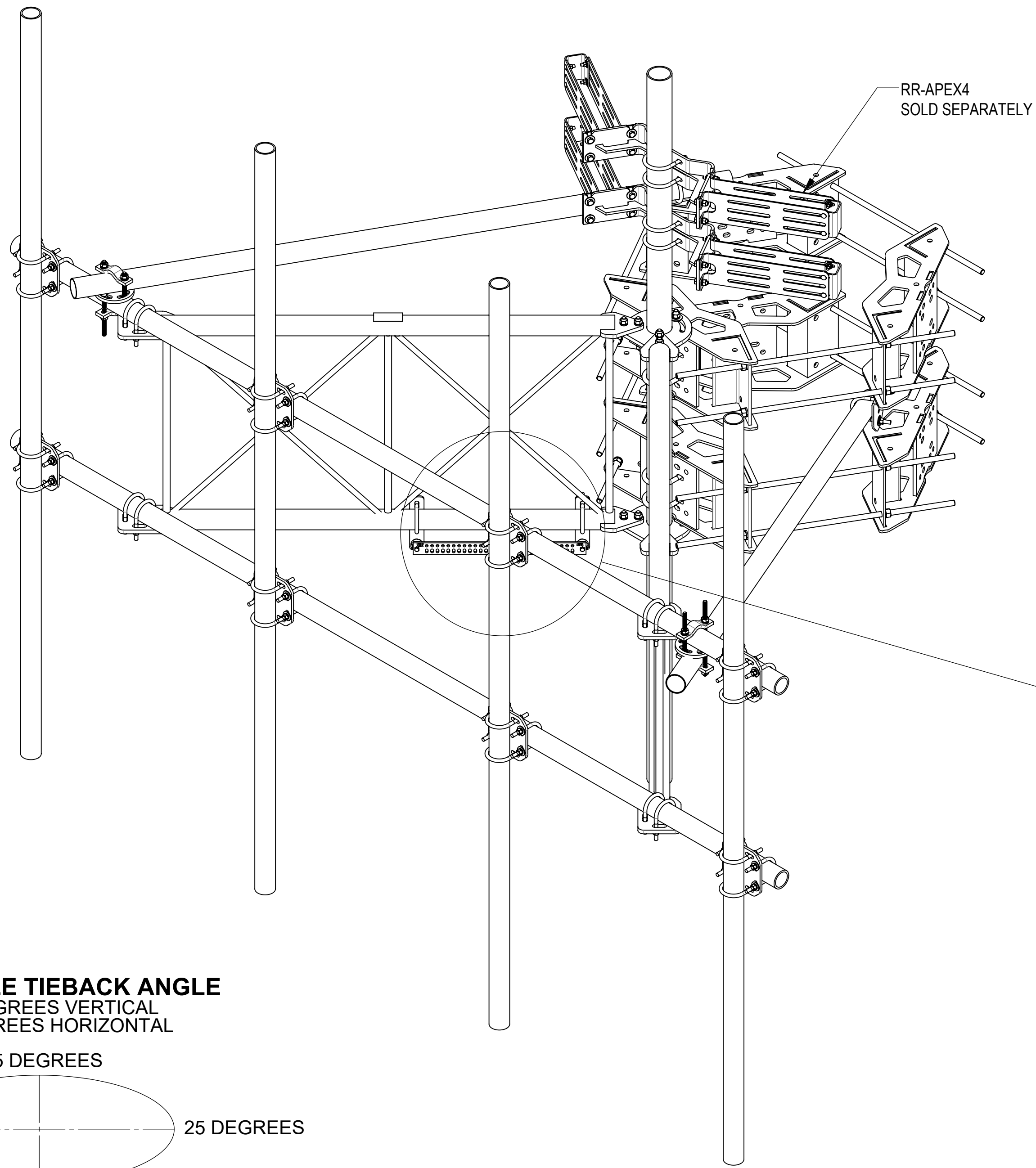
ISO VIEW



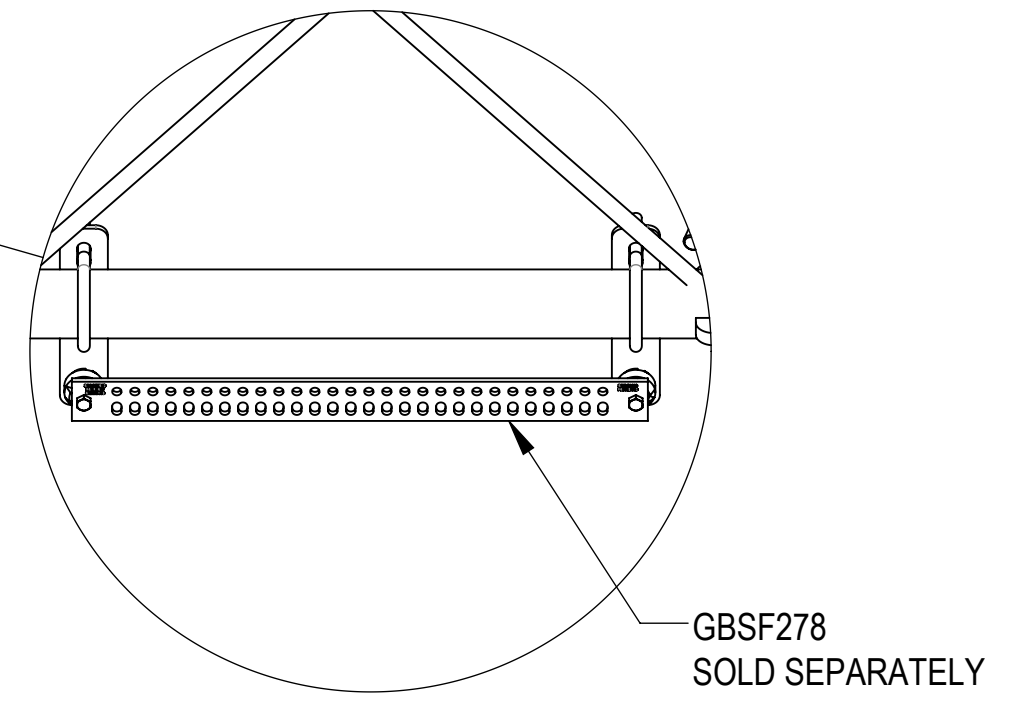
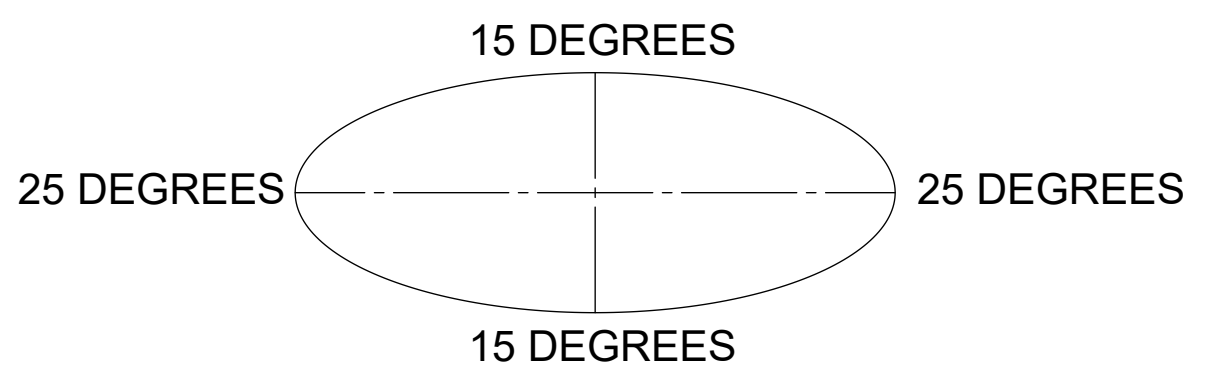
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| COMMSCOPE, INC. OF NORTH CAROLINA       |                      |                                   |              |                 |
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| SIZE<br><b>C</b>                        | SCALE<br><b>1:15</b> | DOCUMENT NO.<br><b>MCG23RHDXL</b> |              |                 |
|   |                      | DRAWING                           |              | SHEET<br>8 OF 9 |
|   |                      | VERSION<br>02                     | STATUS<br>RE |                 |




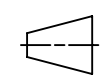
**OPTIONAL ACCESSORIES:**



**ALLOWABLE TIEBACK ANGLE**  
 ±15 DEGREES VERTICAL  
 ±25 DEGREES HORIZONTAL



**DETAIL H**  
 SCALE 1 : 8

|   |                      |                                   |              |               |
|---|----------------------|-----------------------------------|--------------|---------------|
| COMMSCOPE, INC. OF NORTH CAROLINA   |                      |                                   |              |               |
| TITLE<br>MCG23RHDXL SECTOR FRAME SERIES   |                      |                                   |              |               |
| SIZE<br><b>C</b>  | SCALE<br><b>1:12</b> | DOCUMENT NO.<br><b>MCG23RHDXL</b> |              |               |
|   |                      | DRAWING                           |              | SHEET         |
|   |                      | VERSION<br>02                     | STATUS<br>RE | REVISION<br>C |