

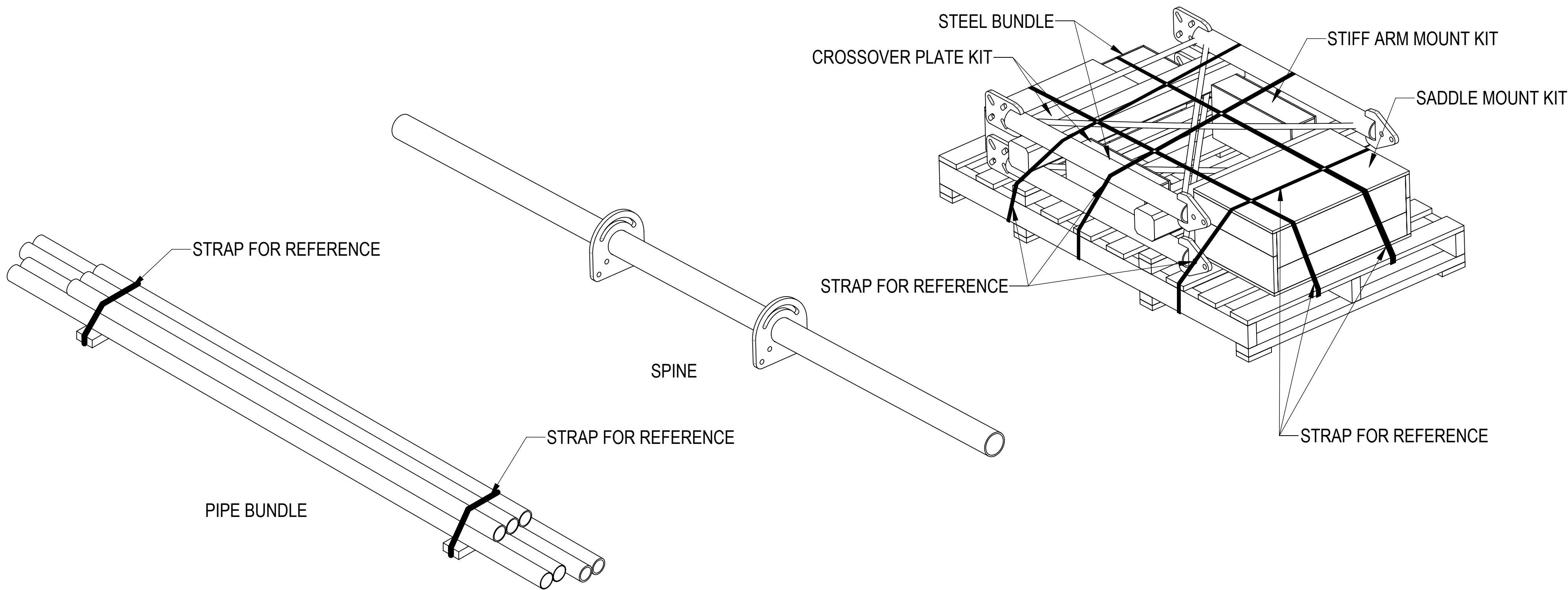
- 1.0 GENERAL NOTES
- 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
- 1.2 FOR PATENT INFO: <https://www.cs-pat.com>

- 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 UP TO 5.0° TAPER AVAILABLE ON MODELS THAT SUPPORT ADJUSTMENT

- 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.

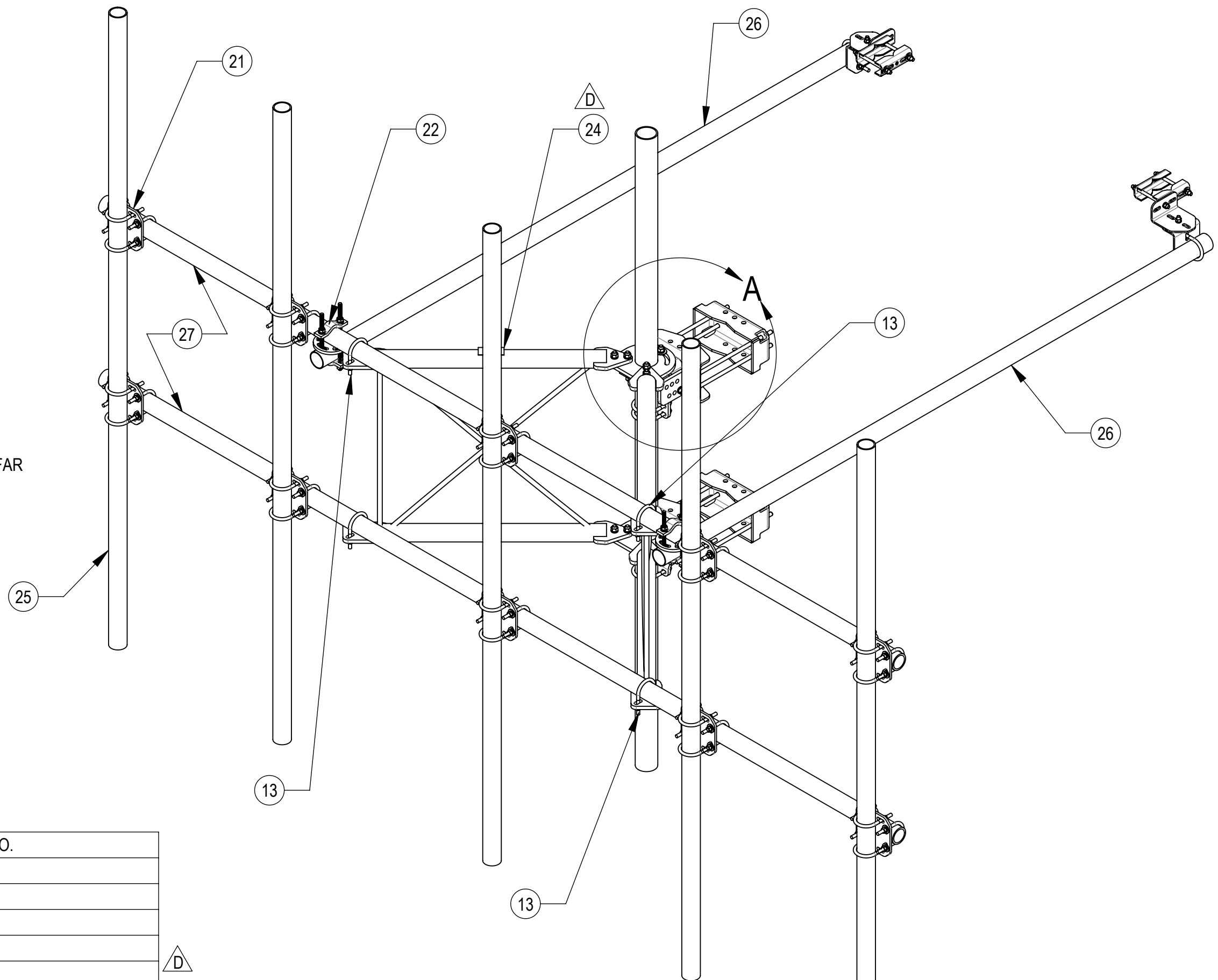
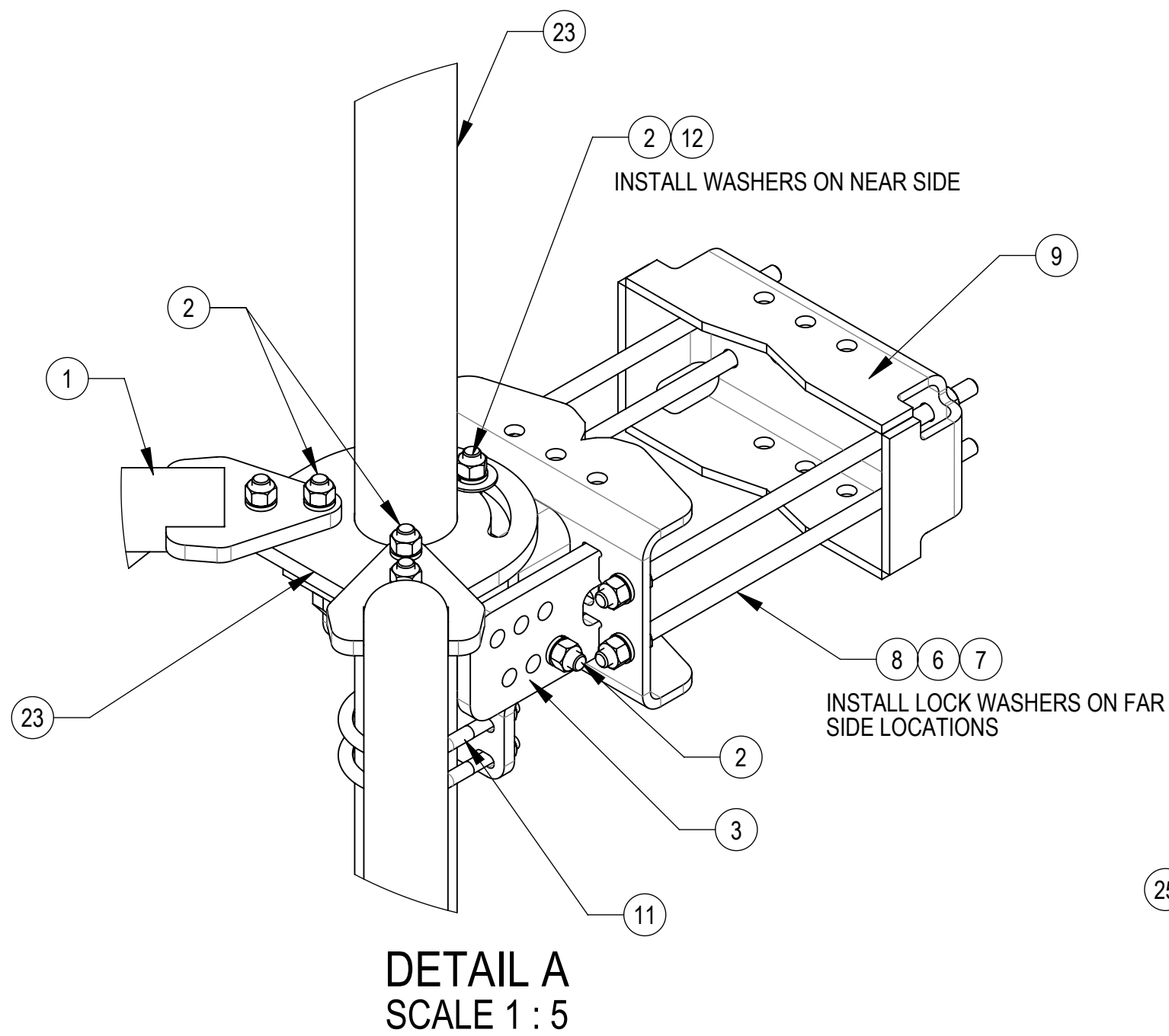
- 4.0 TEST
- 5.0 PACKAGING
- 5.1 PACKAGING SHALL MEET COMMSCOPE REQUIREMENTS PER DOCUMENT IS-PL-3005.
- 5.2 PRINTED DOCUMENT TO BE PLACED INSIDE POLYBAG AND THEN IN SHIPPING CONTAINER.
- 5.3 EXTRA HARDWARE MAYBE SUPPLIED, BAGGED AND SHIPPED.

| REVISIONS | | | |
|-----------|--|-------------------|-----------------------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | ES1081 15DEC20 | BCROSS 8000044024 |
| B | SFG23RHDX SERIES BOM STANDARDIZATION | YH1102 06JUL22 | BCROSS 40148961CMO |
| C | SM-U2080HDG23 WAS SM-U2080HDG22, PALLET CHANGED TO 62X38PALLET, REMOVED SFG2350 | YH1102 16NOV22 | MM1298 40157021CMO |
| D | ADDED SHEET 2; ADDED SFG23RHDX-11-B & SFG23RHDX-11-3-126; CHG QTY SFG2386 TO 1 EA, AND GUB-4355 TO 3 EA; ADDED SFG2397-00; ADDED SFG2398 TO THE TOP OF V-ARM | RY1002 09OCT23 | YW1045 40179941CMO |



| | | | | | | | | | |
|---|-------------|-------------------|------------|--------|---------------------|---------|--------------------|----------|---------|
| COMMSCOPE, INC. OF NORTH CAROLINA | | | | | | | | | |
| TOLERANCES | | | | | SAP MATERIAL MASTER | | | | |
| 0 PLACE | | X[X] ± 0.2[5] | | | 2 PLACE | | .XX[X] ± 0.06[1.5] | | |
| 1 PLACE | | .X[X] ± 0.12[3.0] | | | ANGLES | | ± 2° | | |
| FINISH | | | | | MATERIAL | | | | |
| SFG23RHDX SECTOR FRAME SERIES | | | | | | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET PER ANSI Y 14.5M-1994 | | NAME | DATE | TITLE | | | | | |
| CE | ES1081 | | 12/15/20 | | | | | | |
| RW | RY1002 | | 10/13/2023 | | | | | | |
| AD | YW1045 | | 10/13/2023 | | | | | | |
| RE | RY1002 | | 11/02/2023 | | | | | | |
| ECN | 40179941CMO | | | | | | | | |
| SCALE | | DOCUMENT NO. | | | | | | | |
| 1:18 | | SFG23RHDX | | | | | | | |
| SIZE | Auth Group | INSL | MODEL | | | DRAWING | | | |
| C | | | VERSION | STATUS | REVISION | VERSION | STATUS | REVISION | SHEET |
| | | | 05 | RE | D | 07 | RE | D | 1 OF 10 |

| | |
|--------------|---------------------|
| DENSITY | lbs/in ³ |
| MASS | lbs |
| VOLUME | in ³ |
| SURFACE AREA | in ² |
| HEIGHT | |
| LENGTH | |
| WIDTH | |



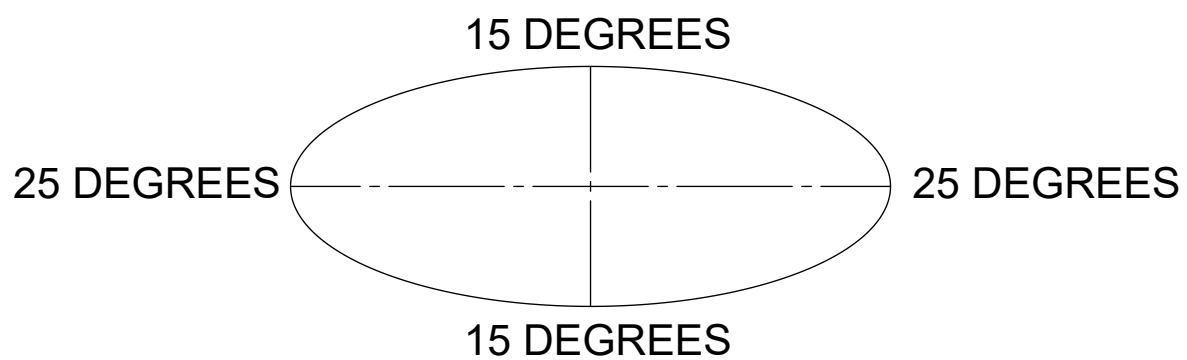
COMPONENT PART NUMBERS PROVIDED FOR ASSEMBLY PURPOSES;
INDIVIDUAL COMPONENTS MAY BE SHIPPED AS PARTS WITHIN AN INCLUDED KIT.

| ITEM | PART NO. | DESCRIPTION | QTY. | WEIGHT | NOTE NO. |
|------|-------------|--|------|------------|---|
| 1 | SFG23175 | ARM, STANDOFF - SFG23 | 2 | 63.28 LBS | |
| 2 | GB-05225 | 5/8" X 2-1/4" GALV BOLT KIT | 14 | 0.28 LBS | |
| 3 | SFG2380 | WELDMENT, HD, TOP TAPER BRACKET | 1 | 22.78 LBS | |
| 4 | SFG2386 | WELDMENT, SFG2 AZIMUTH BRACKET | 1 | 10.69 LBS | |
| 5 | SFG2397-00 | WELDMENT, G23 AZIMUTH BRACKET | 1 | 8.56 LBS | |
| 6 | GN-05 | 5/8" GALV HEX NUT | 24 | 0.08 LBS | |
| 7 | GN-05 | 5/8" GALV LOCK WASHER | 16 | 0.03 LBS | |
| 8 | MT-382-18 | 5/8" X 18" THREADED ROD | 8 | 1.43 LBS | |
| 9 | SFG2289 | G2 RRU BACK CLAMP, HD | 2 | 18.65 LBS | |
| 10 | SFG2381 | WELDMENT, HD, LOWER TOWER LEG BRACKET | 1 | 17.42 LBS | |
| 11 | GUB-4355 | 1/2" X 3-5/8" X 5" GALV U-BOLT | 3 | 0.71 LBS | |
| 12 | GWF-05 | 5/8" GALV FLAT WASHER, 1.70D | 2 | 0.06 LBS | |
| 13 | GUB-4352 | 1/2" X 3" X 5-1/4" GALV U-BOLT | 6 | 0.71 LBS | |
| 14 | SAB01 | FORMED CLAMP | 4 | 1.35 LBS | |
| 15 | MT-379-8 | 1/2" X 8" GALV THREADED ROD | 4 | 0.45 LBS | |
| 16 | XAU01 | ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD | 4 | 2.98 LBS | |
| 17 | GB-04145 | 1/2" X 1-1/2" GALV BOLT KIT | 2 | 0.13 LBS | |
| 18 | GWF-04 | 1/2" GALV FLAT WASHER | 8 | 0.04 LBS | |
| 19 | GWL-04 | 1/2" GALV LOCK WASHER | 10 | 0.01 LBS | |
| 20 | GN-04 | 1/2" GALV HEX NUT | 10 | 0.04 LBS | |
| 21 | XP-2525 | CROSSOVER PLATE KIT, 2-7/8 OD X 2-7/8 OD | 10 | 8.37 LBS | QTY SEE INDIVIDUAL DRAWING |
| 22 | XP-R | CROSSOVER PLATE, ROUND, UP TO 3.5" OD | 2 | 6.20 LBS | |
| 23 | SFG2204 | WELDMENT, BACK VERTICAL ARM MOUNT | 1 | 97.29 LBS | |
| 24 | SFG2398 | LABEL, SFG23RHDX | 1 | 0.04 LBS | |
| 25 | MT546120 | PIPE, 2.875"OD X 120" | 5 | 57.45 LBS | PART NO. AND QTY SEE INDIVIDUAL DRAWING |
| 26 | MT546120120 | PIPE, 2.875"OD X 120" | 2 | 35.44 LBS | |
| 27 | MT546174276 | PIPE, 2.875"OD X 174" | 2 | 111.49 LBS | PART NO. SEE INDIVIDUAL DRAWING |

SFG23RHDX-14-5-120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE)

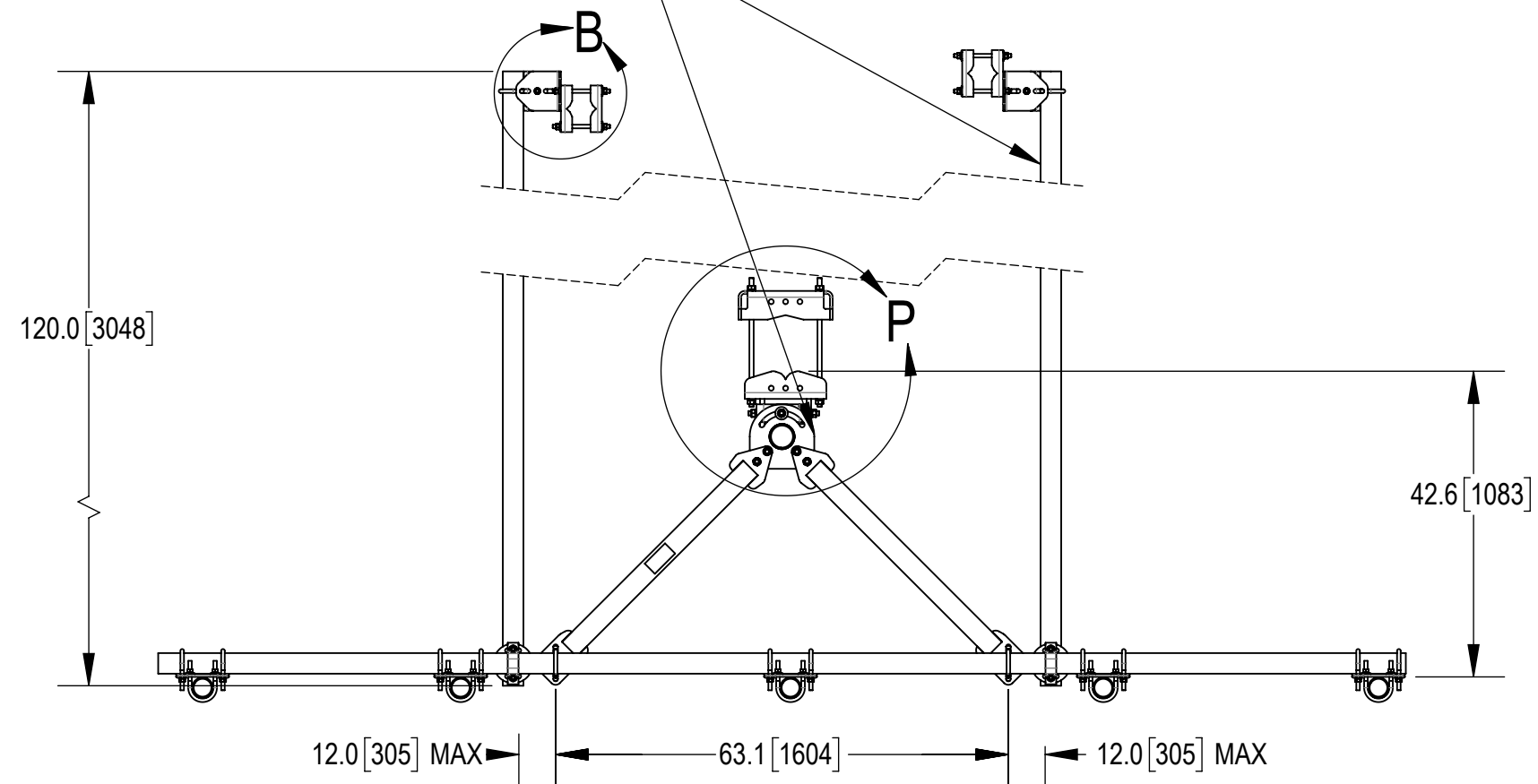
ALLOWABLE TIEBACK ANGLE

± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL

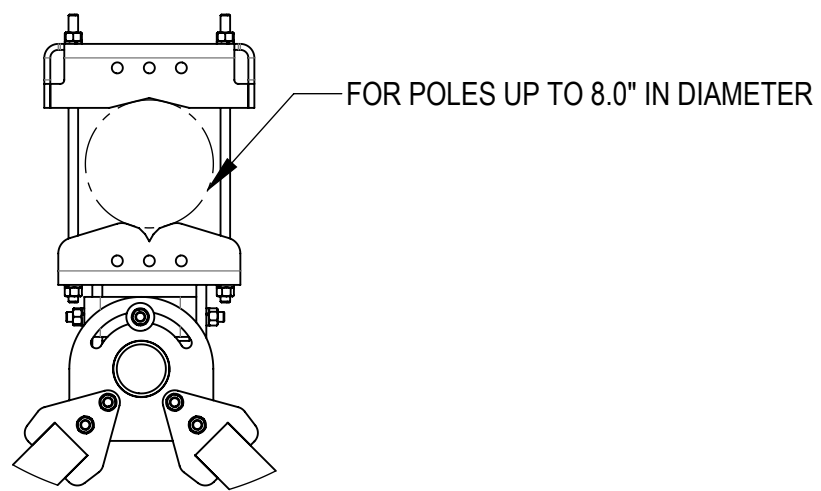
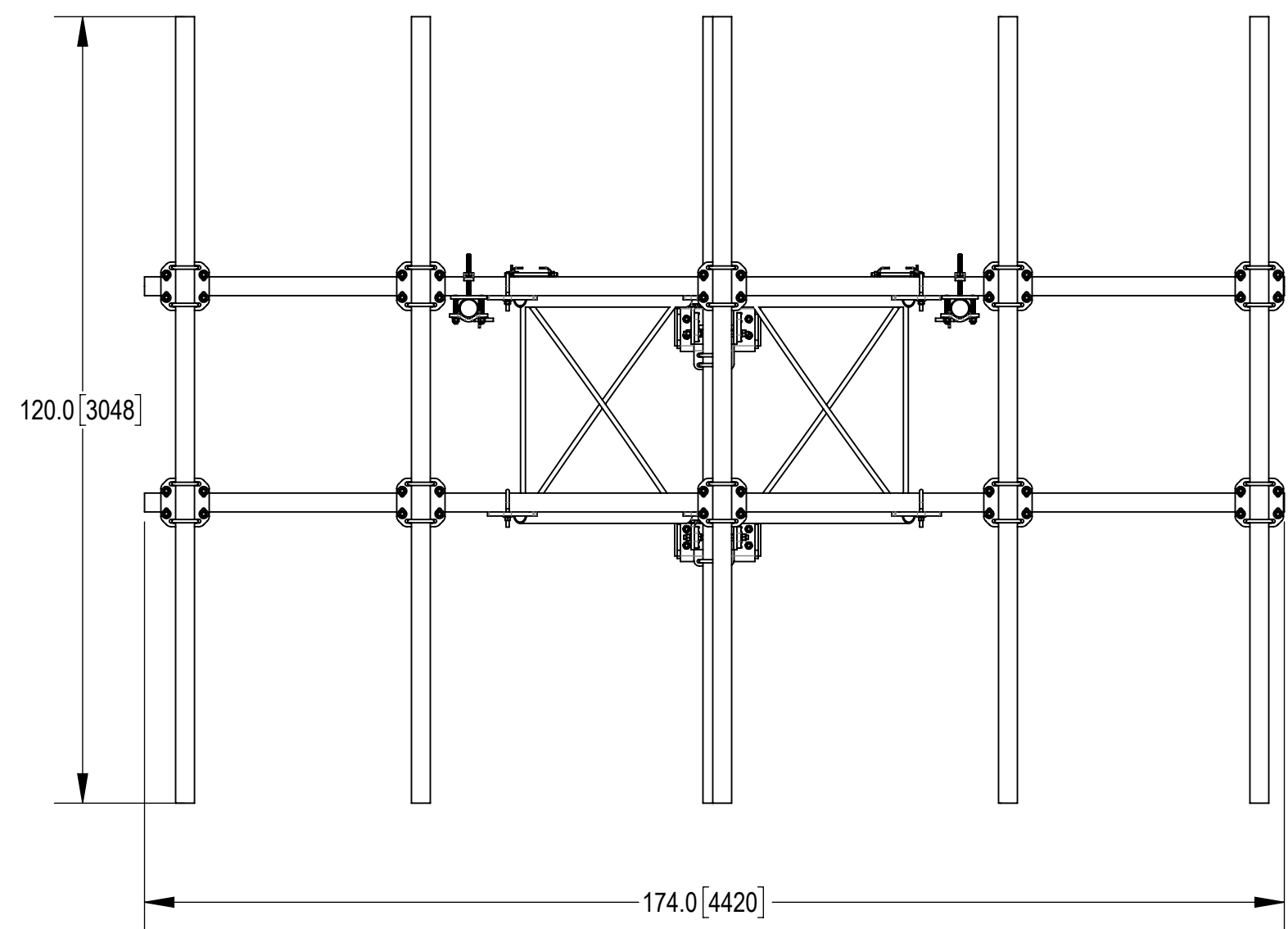


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| TITLE SFG23RHDX SECTOR FRAME SERIES | | | | |
| SIZE C | SCALE 1:16 | DOCUMENT NO. SFG23RHDX | | |
| DRAWING | | REVISION | | SHEET |
| VERSION 07 | STATUS RE | REVISION D | 3 OF 10 | |

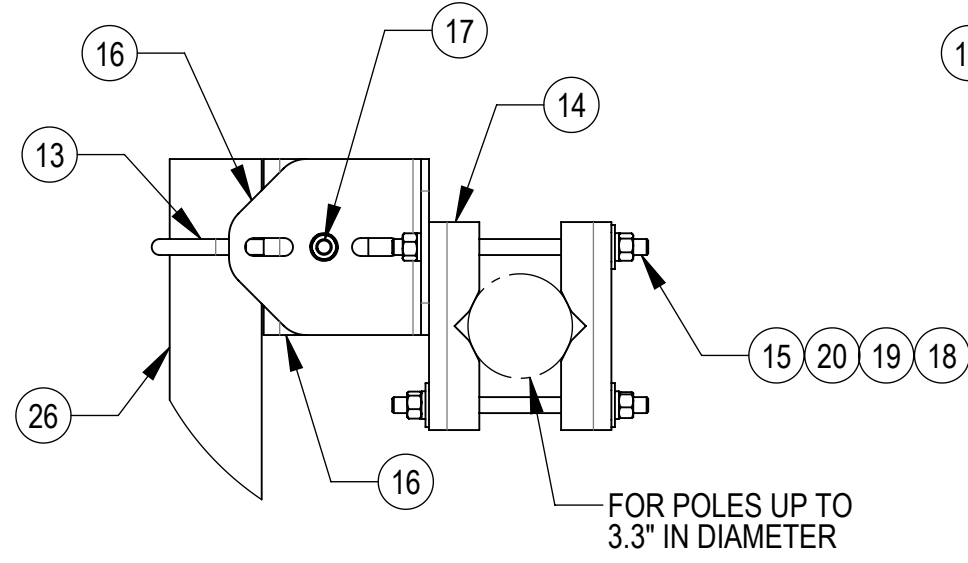
TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED IN THE TIEBACK ANGLE RANGE DETAIL. UNLESS APPROVED BY ENGINEER OF RECORD. SPINE STEM OF NEIGHBORING MOUNT IS ACCEPTABLE.



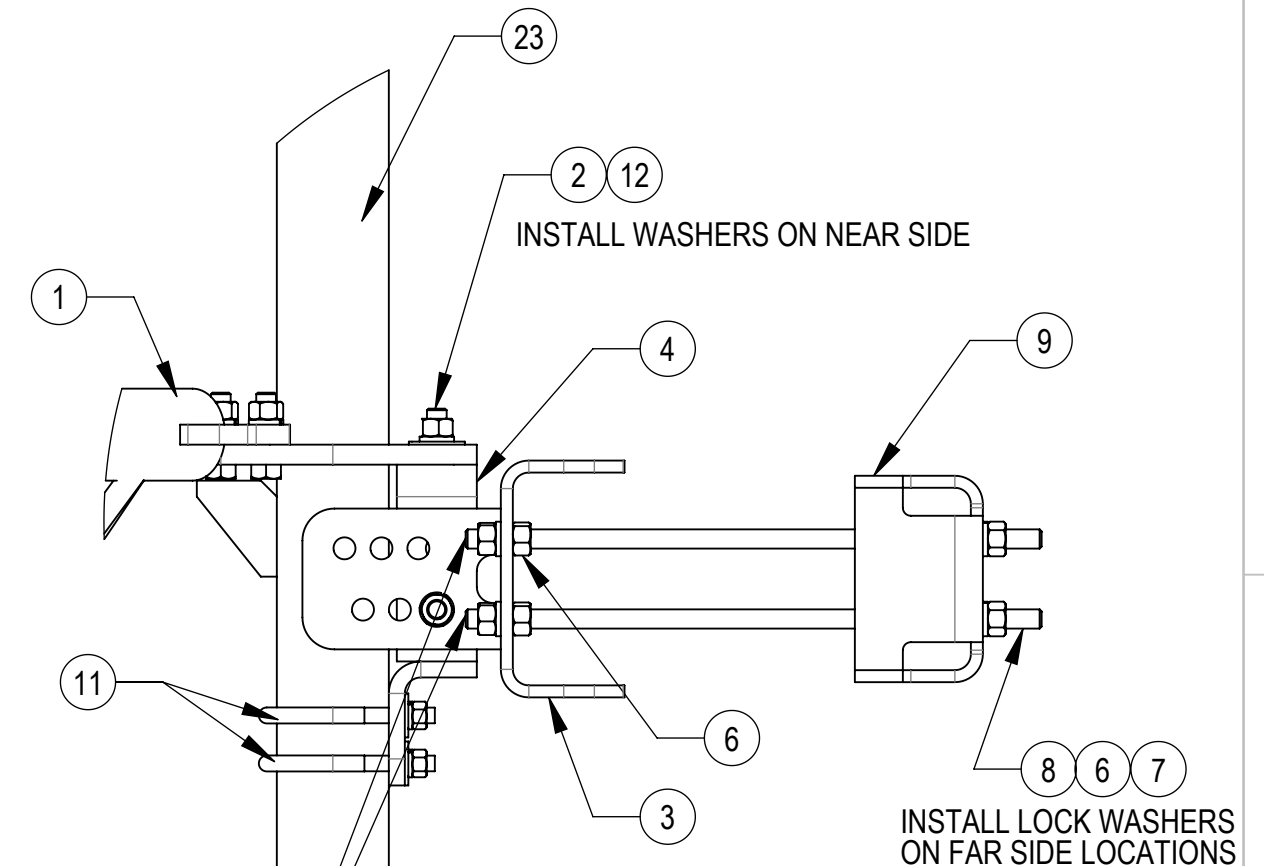
SFG23RHDX-14-5-120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE ON PAGE 3.)



DETAIL P
SCALE 1 : 12

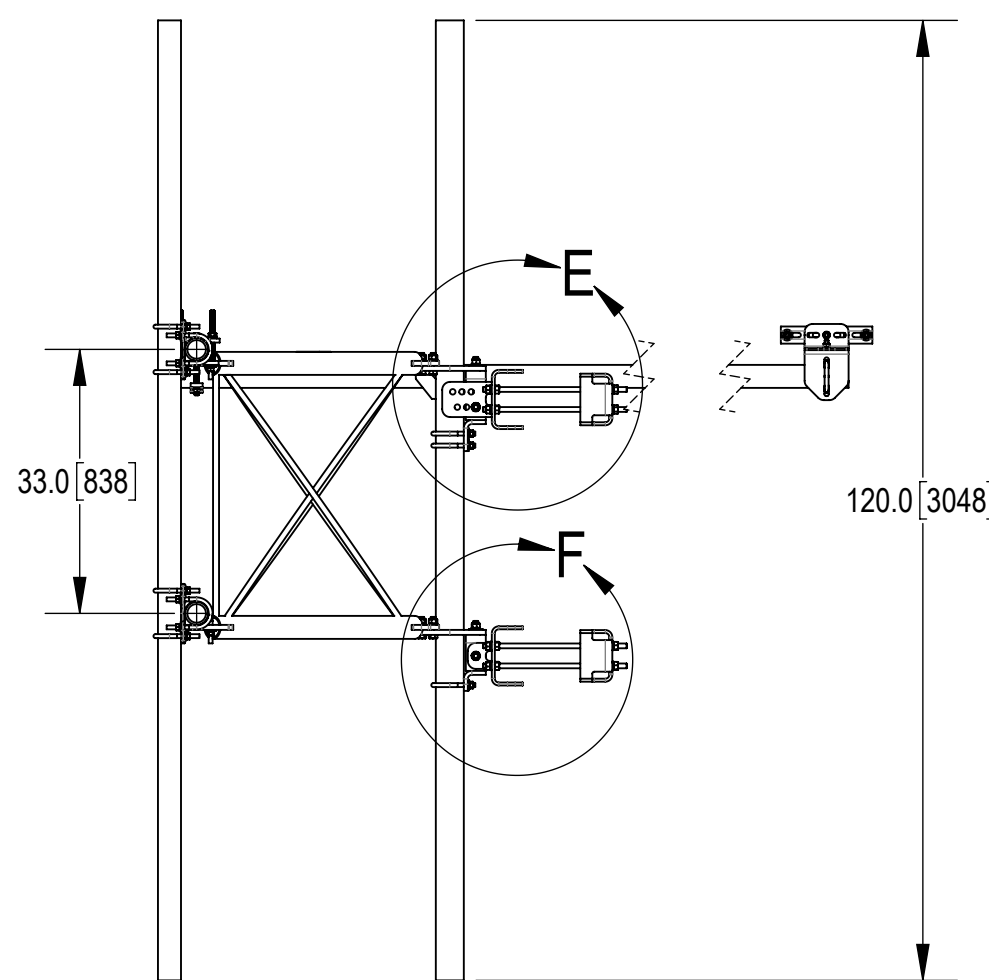


DETAIL B
SCALE 1 : 6

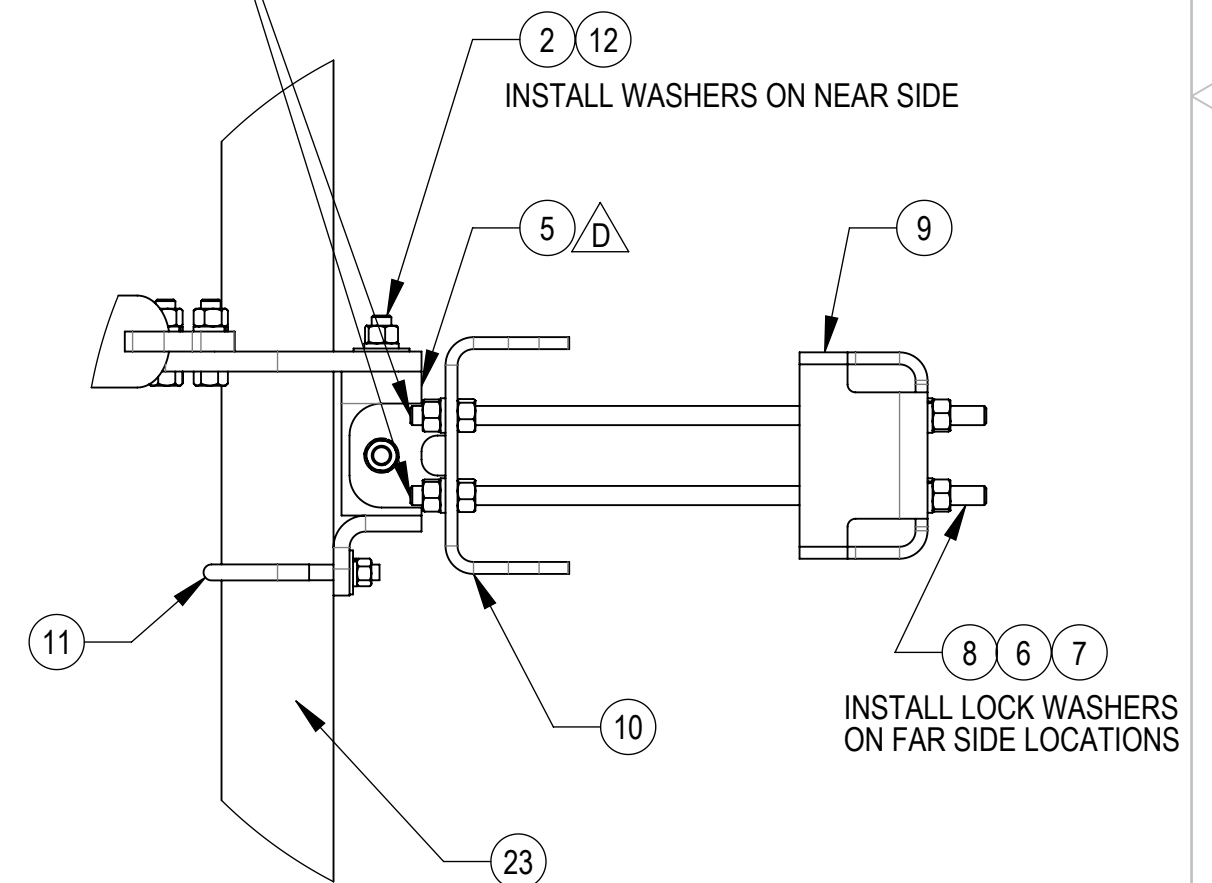
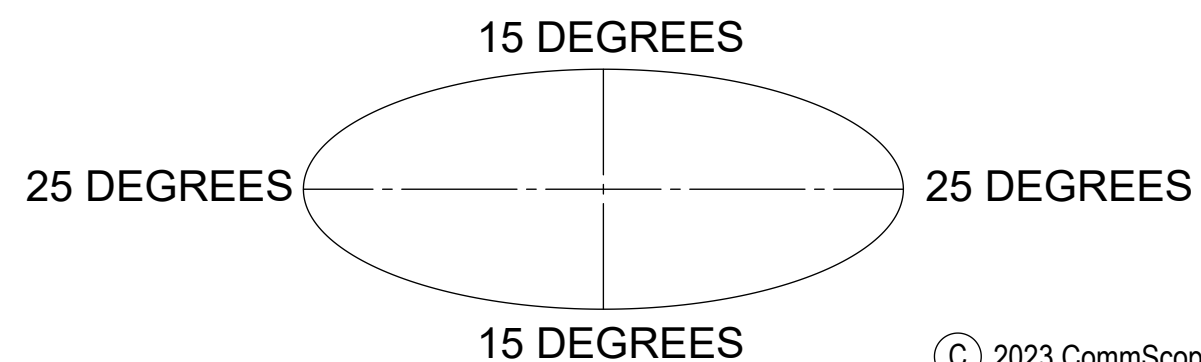


DETAIL E
SCALE 1 : 6

THE THREADED ROD CAN ONLY EXPOSE 4 TO 7 THREADS ON ONE SIDE OF THE BRACKET, WHICH IS TO PREVENT INTERFERENCE WITH THE SIDE BOLTS



ALLOWABLE TIEBACK ANGLE
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



DETAIL F
SCALE 1 : 6

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| SIZE C | SCALE 1:24 | DOCUMENT NO. SFG23RHDX | | |
| | | DRAWING | | SHEET |
| | | VERSION 07 | STATUS RE | REVISION D |
| | | | | 4 OF 10 |

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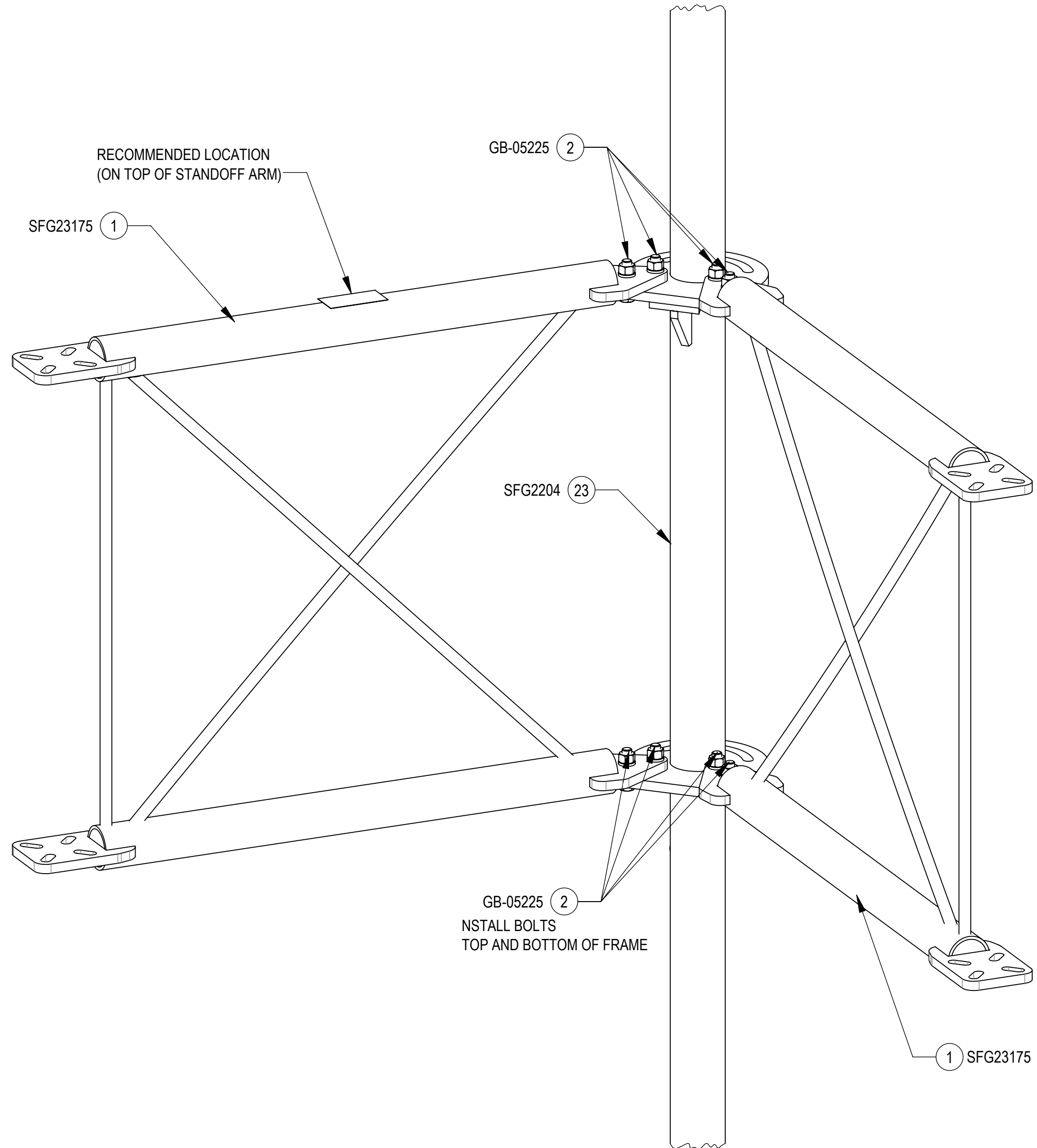
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INSTALLATION SEQUENCE - REFERENCE ONLY

STEP 1: ATTACH STANDOFF ARMS (SFG23175) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KITS (GB-05225)



ISO VIEW

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| SIZE C | SCALE 1:6 | DOCUMENT NO. SFG23RHDx | | |
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| | | VERSION | STATUS | REVISION |
| | | 07 | RE | D |
| | | | | SHEET 5 OF 10 |

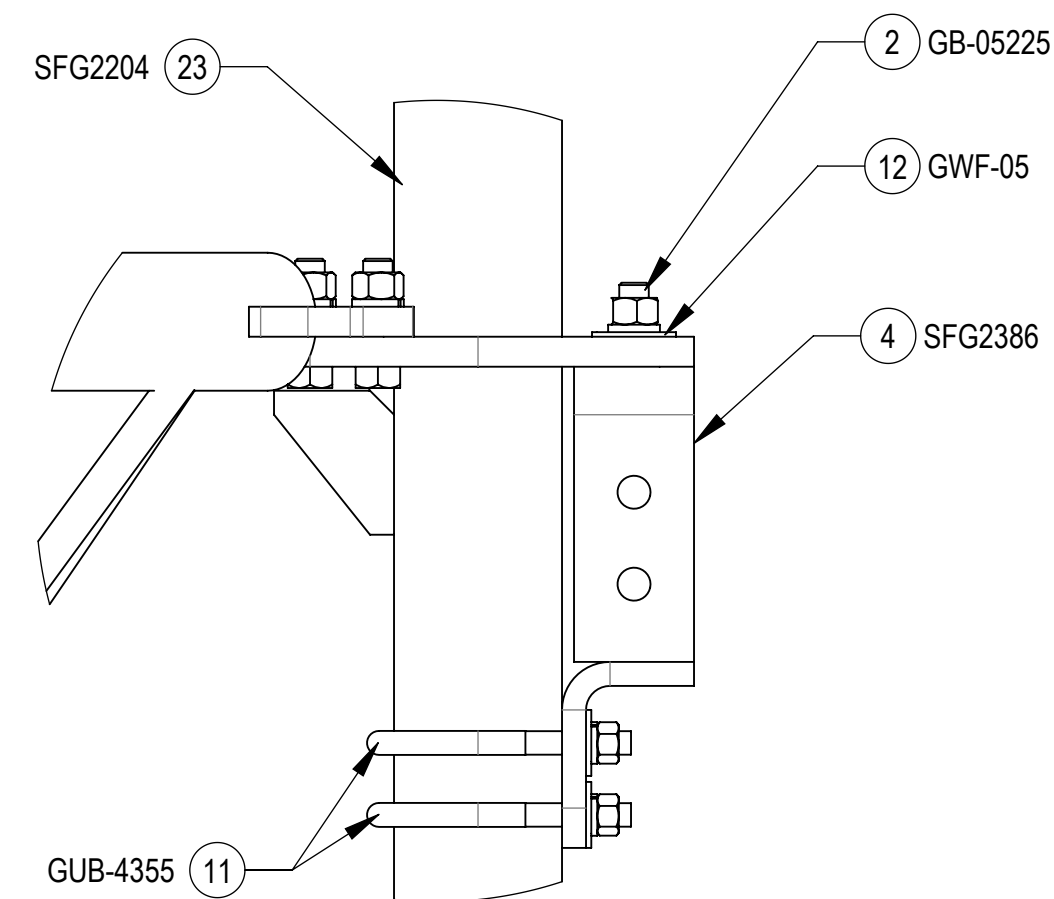
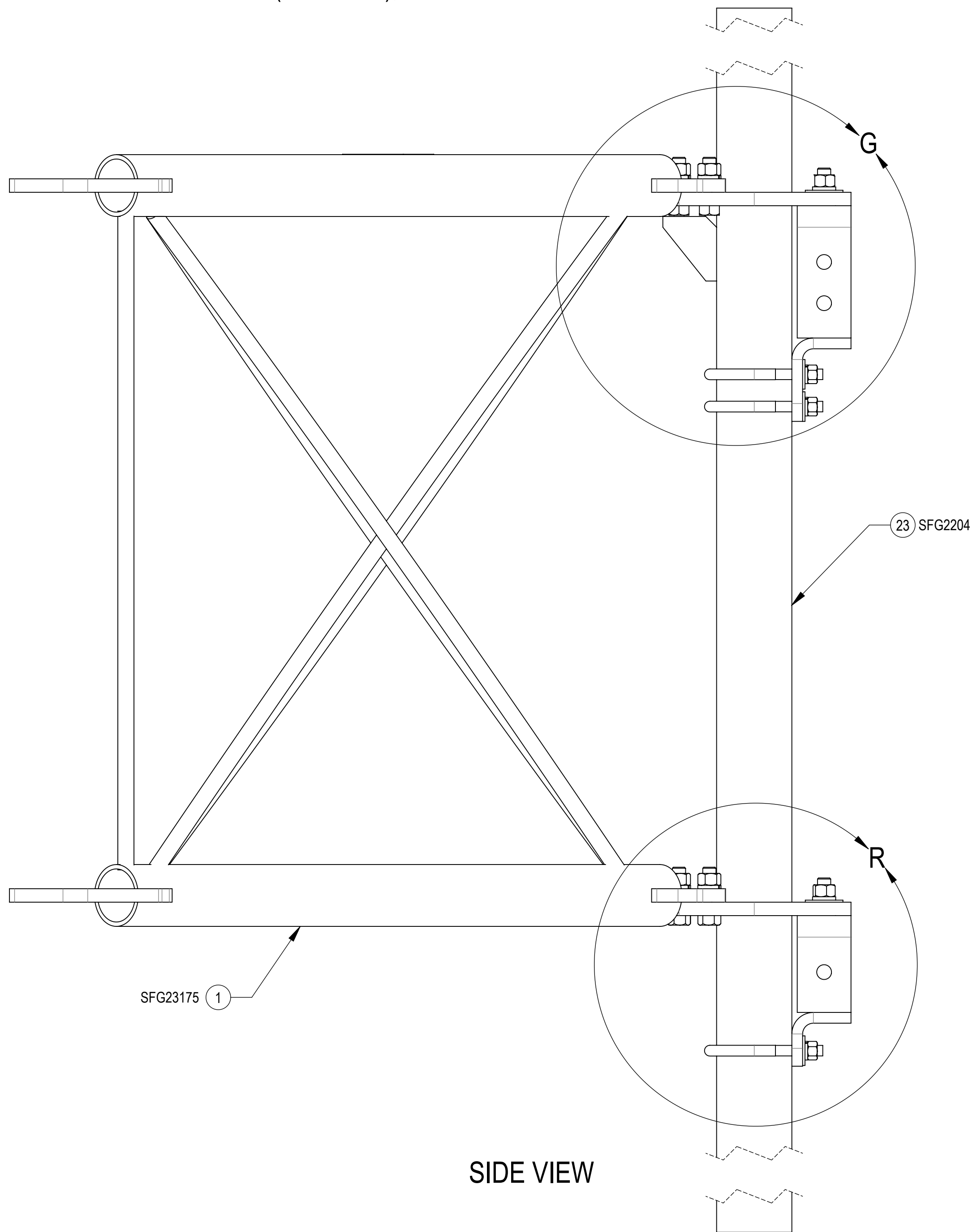
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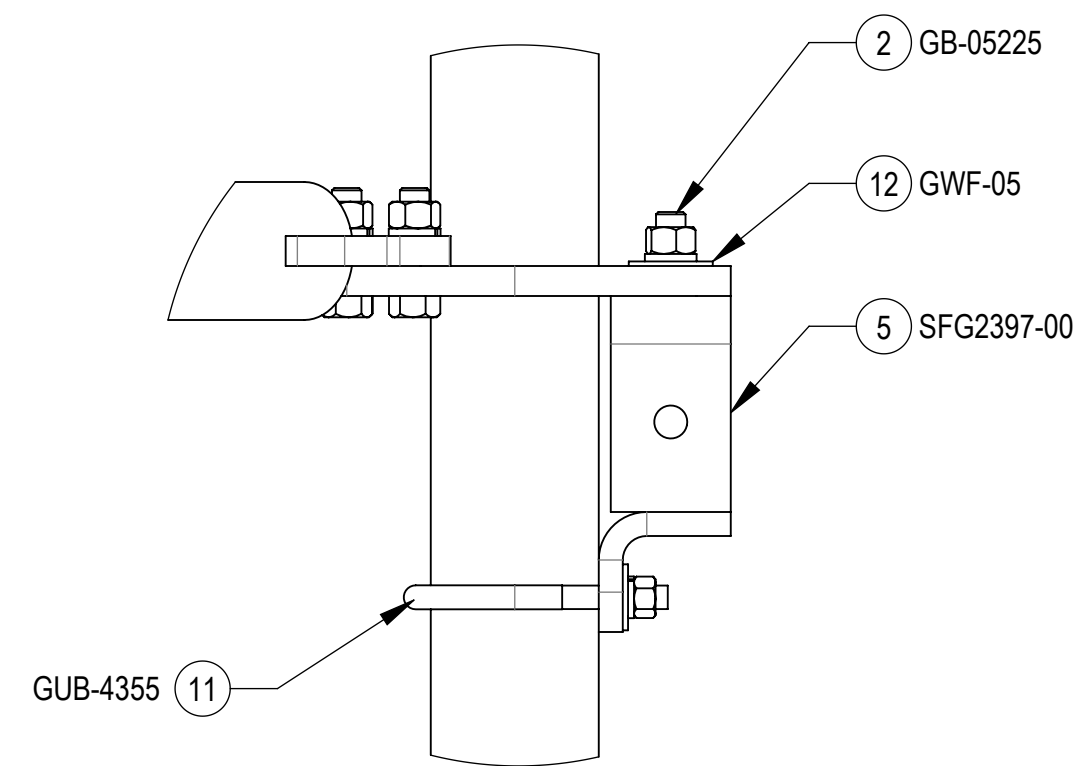
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STEP 2: AT TOP, ATTACH AZIMUTH/TAPER BRACKET (SFG2386) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225), FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355);
 AT BOTTOM, ATTACH AZIMUTH/TAPER BRACKET (SFG2397-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225), FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355);



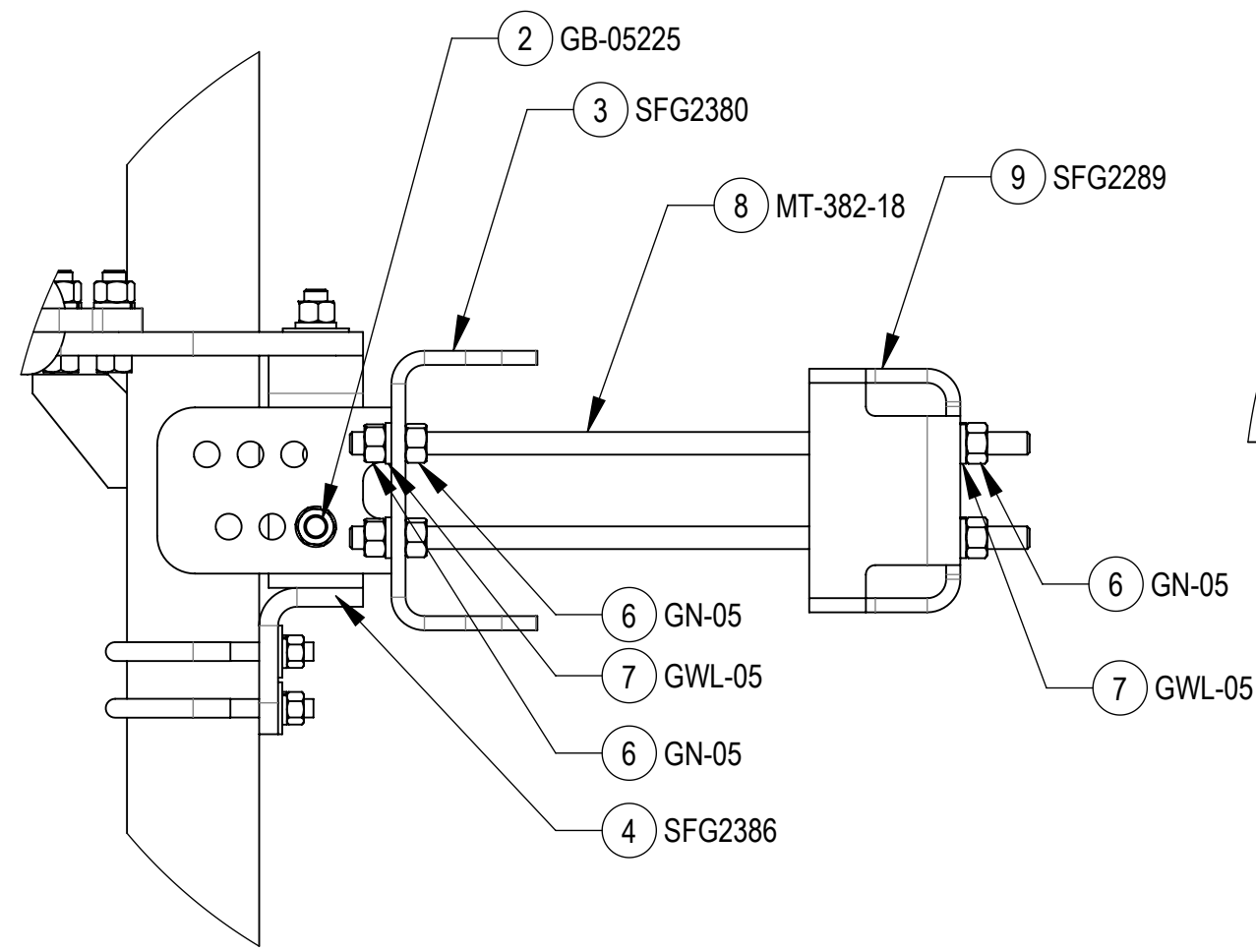
DETAIL G
SCALE 1 : 4



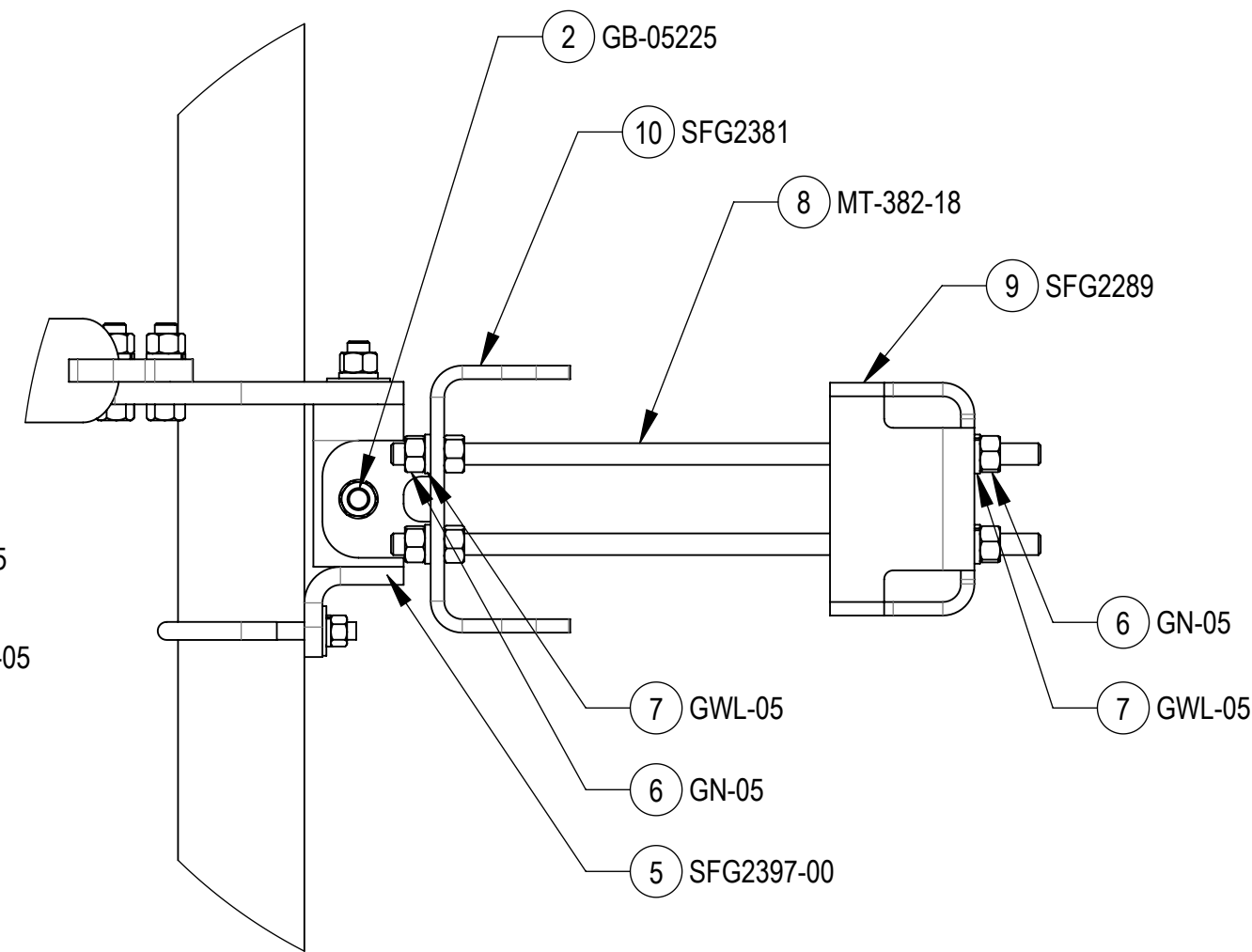
DETAIL R
SCALE 1 : 4

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| TITLE SFG23RHDX SECTOR FRAME SERIES | | | | |
| SIZE C | SCALE 1:4 | DOCUMENT NO. SFG23RHDX | | |
| | | DRAWING | | SHEET 6 OF 10 |
| | | VERSION 07 | STATUS RE | |

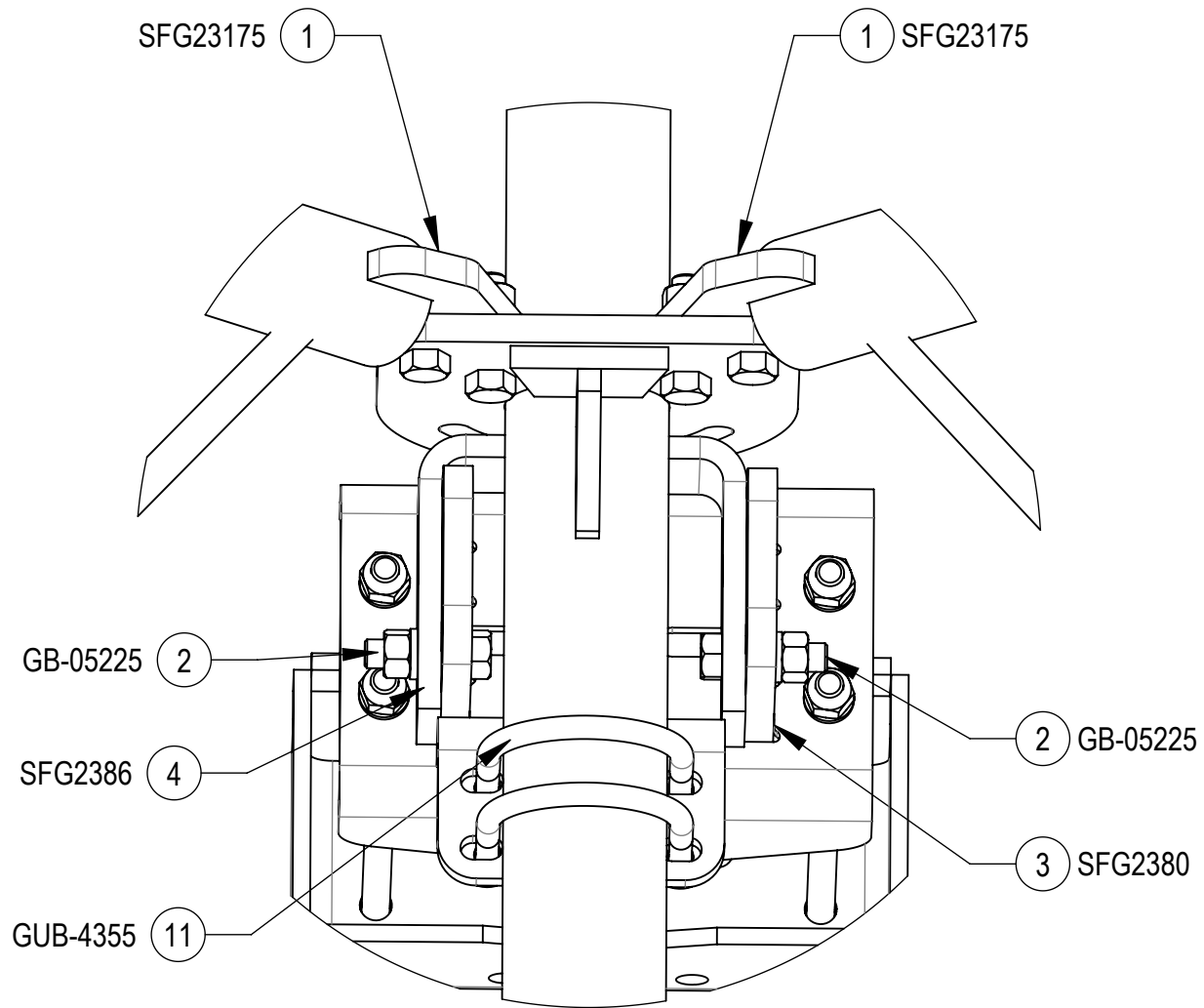
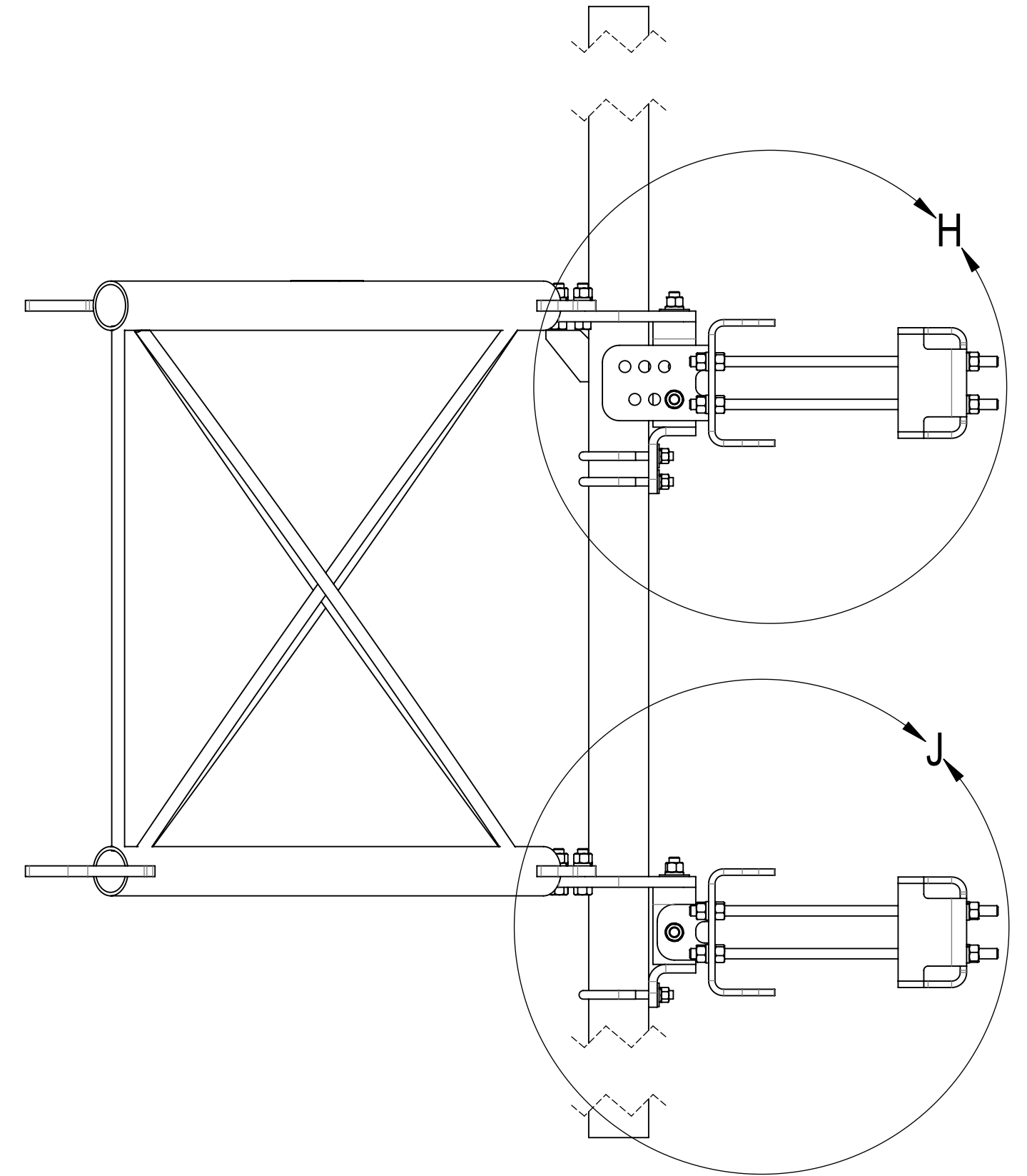
STEP 3: AT TOP, ATTACH TOP TAPER BRACKET (SFG2380) AZIMUTH/TAPER BRACKET (SFG2386) USING BOLTS KITS (GB-05225)
 AT BOTTOM, ATTACH LOWER TOWER LEG BRACKET (SFG2381) TO AZIMUTH/TAPER BRACKET (SFG2397-00) USING BOLTS KITS (GB-05225)



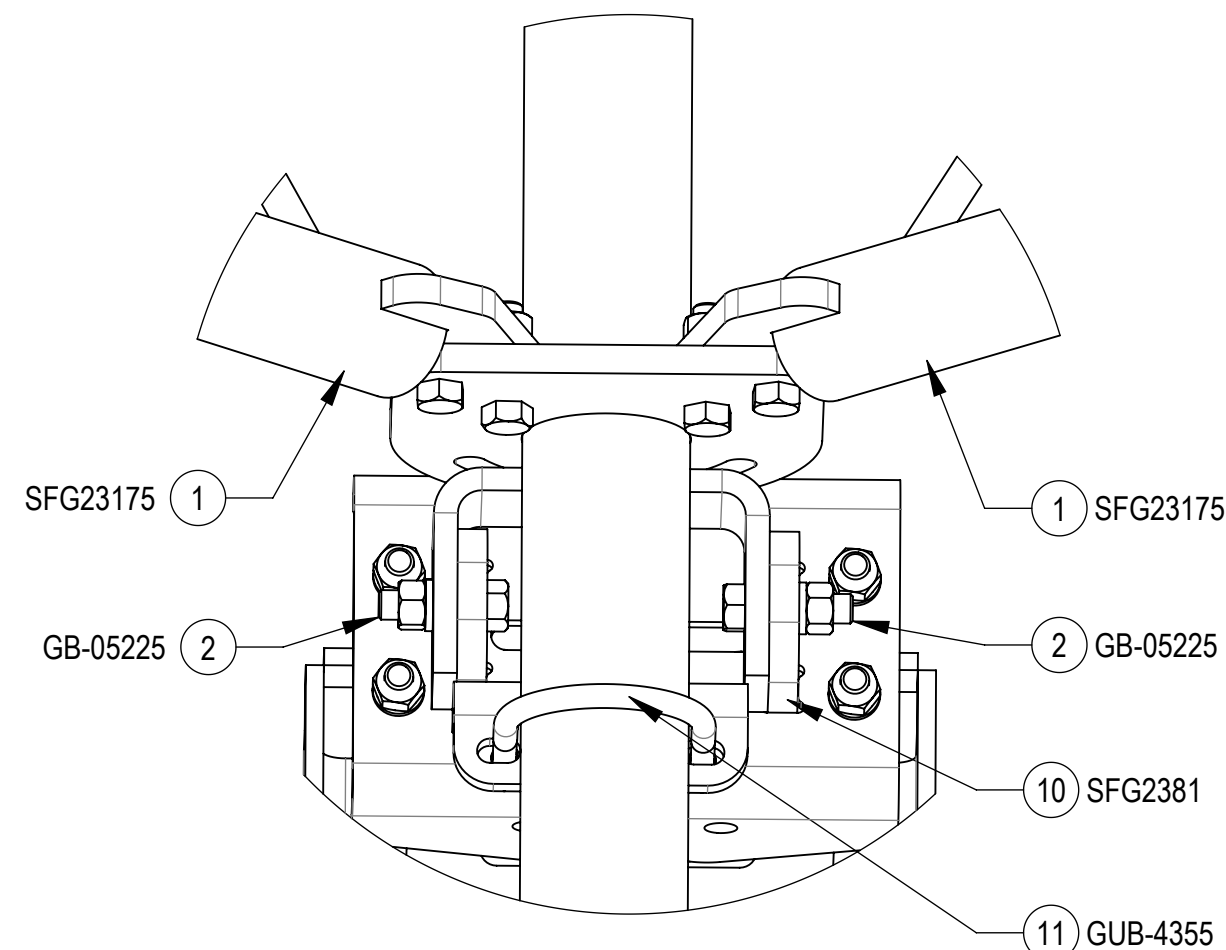
DETAIL H
SCALE 1 : 5



DETAIL J
SCALE 1 : 5



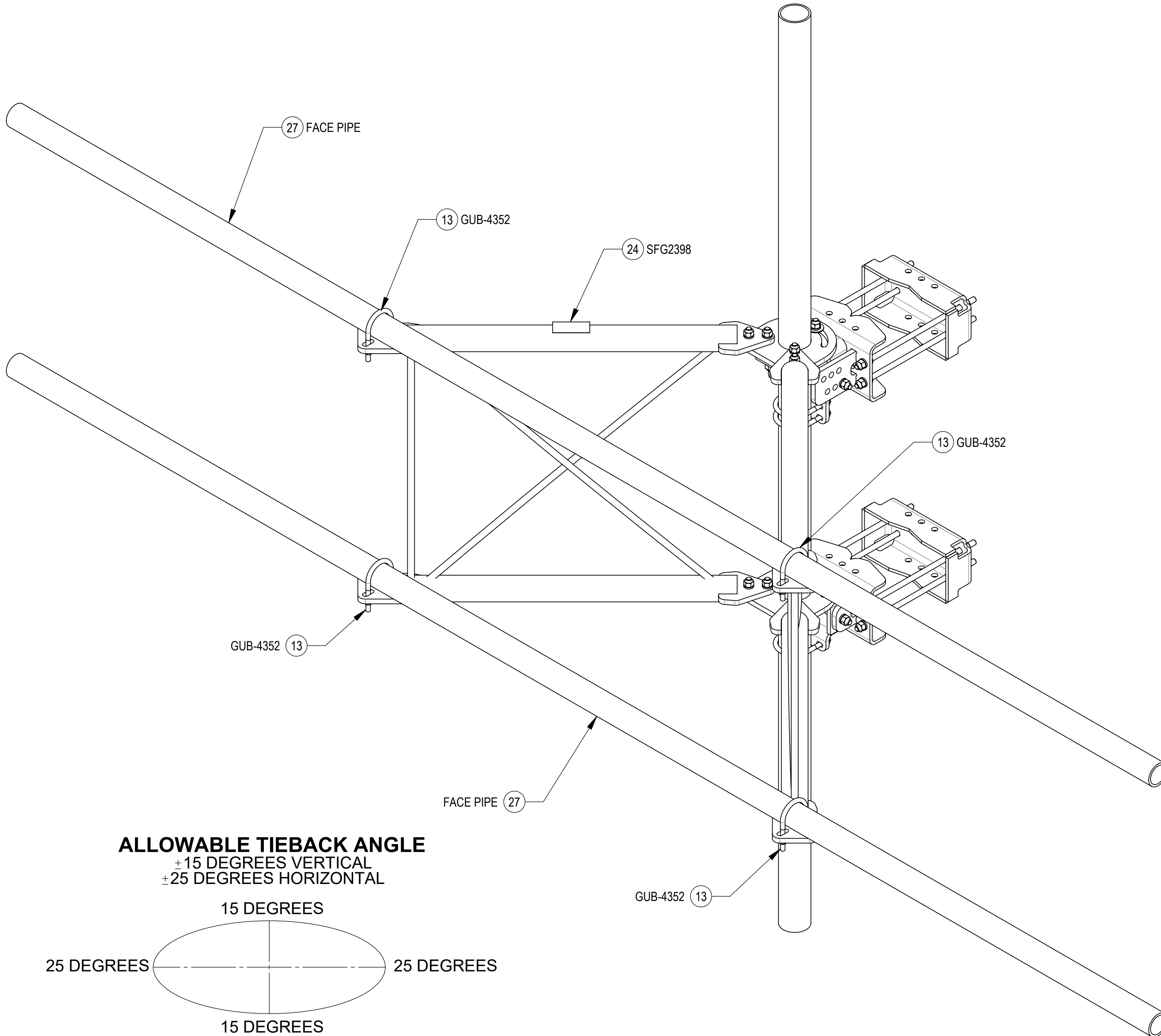
DETAIL ISO TOP ROTATED VIEW
SCALE 1 : 4



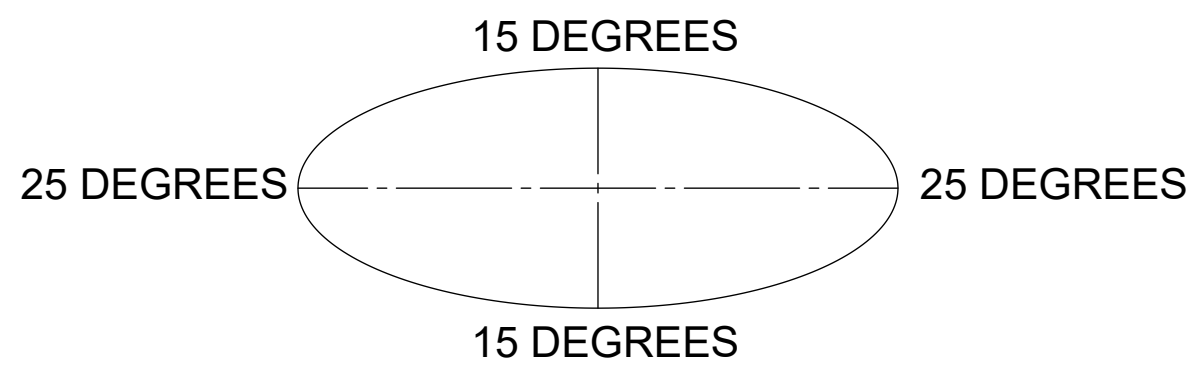
DETAIL ISO BOTTOM ROTATED VIEW
SCALE 1 : 4


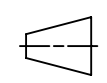
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| SIZE C | SCALE 1:6 | DOCUMENT NO. SFG23RHDX | | |
| | | DRAWING | | SHEET |
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| | | | | 7 OF 10 |

STEP 4: ATTACH FACE PIPES TO STANDOFF ARMS USING U-BOLTS (GUB-4352)

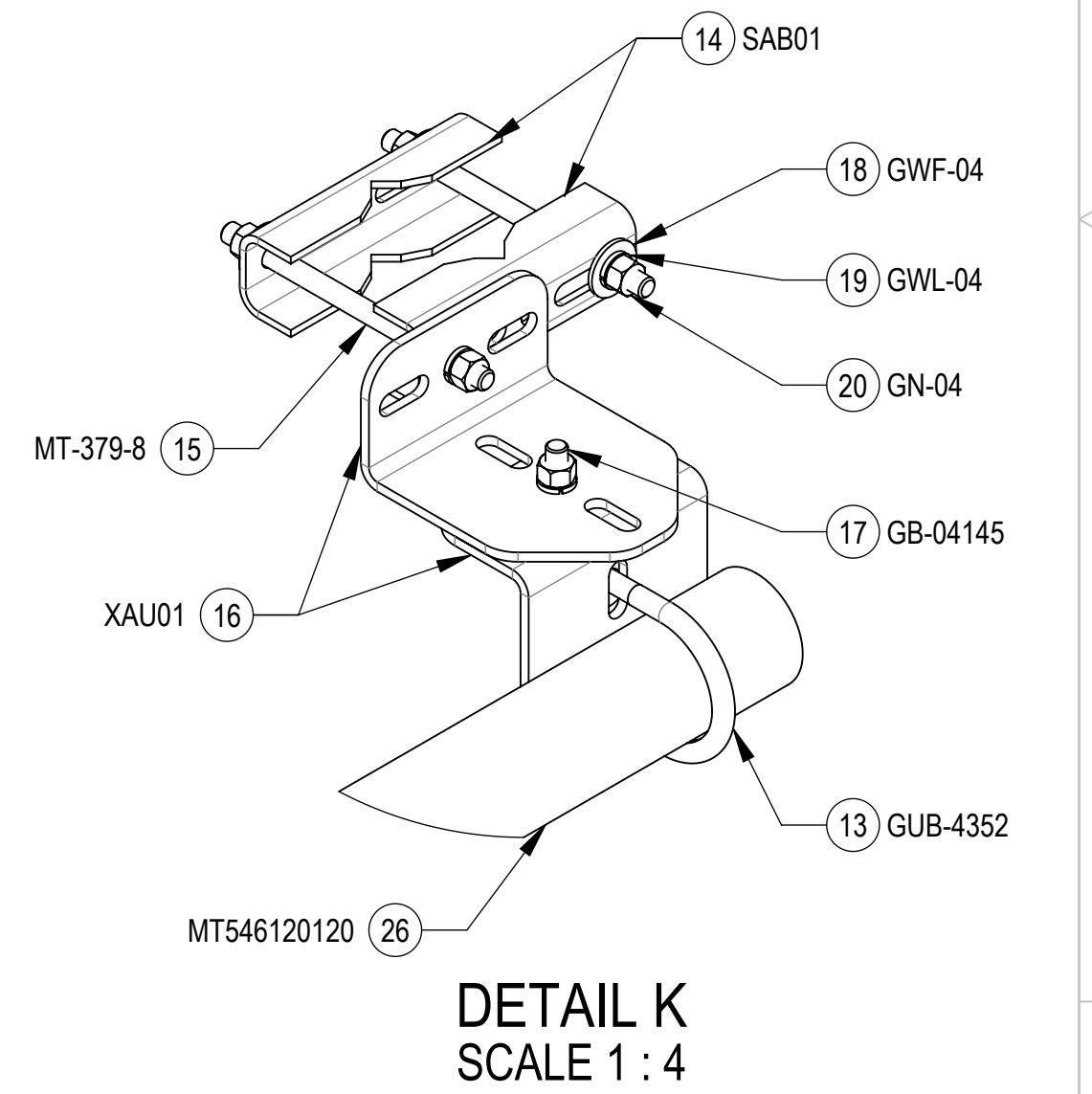
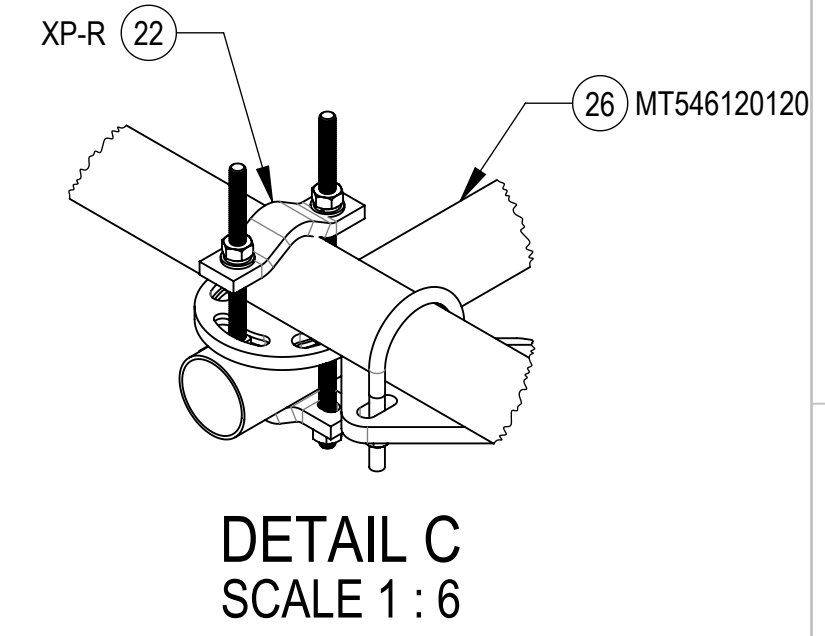
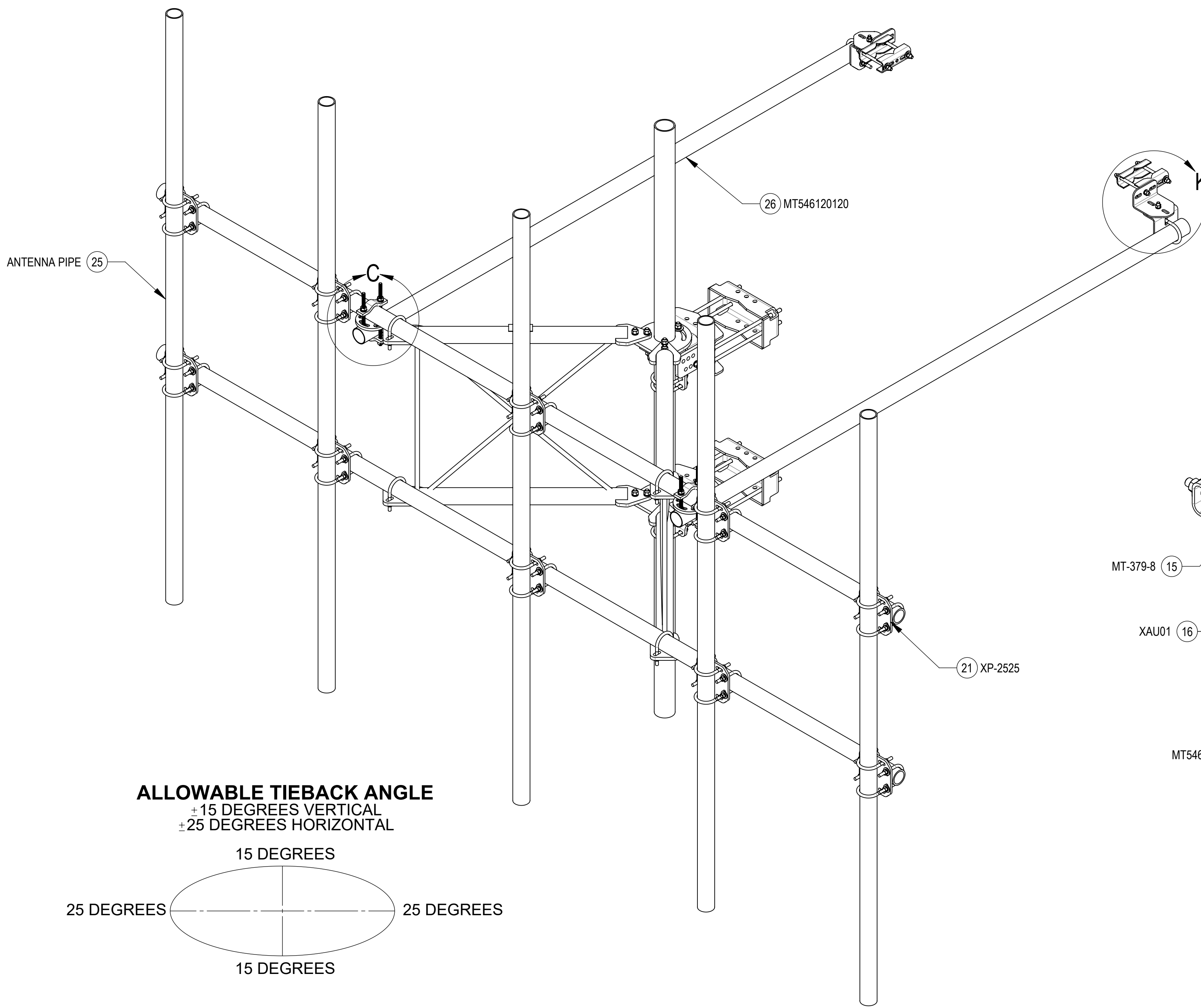


ALLOWABLE TIEBACK ANGLE
 ±15 DEGREES VERTICAL
 ±25 DEGREES HORIZONTAL

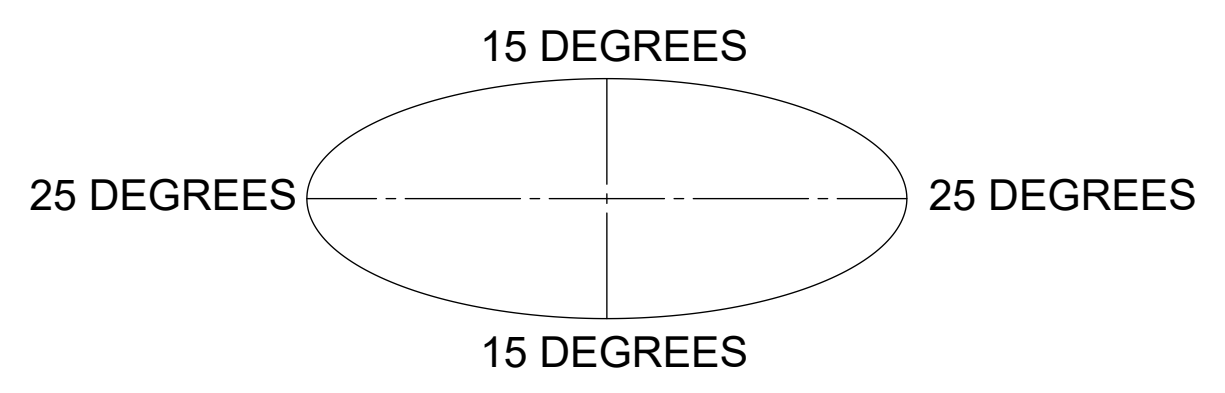


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| TITLE SFG23RHDX SECTOR FRAME SERIES | | | | |
| SIZE C | SCALE 1:8 | DOCUMENT NO. SFG23RHDX | | |
|   | | DRAWING | | SHEET 8 OF 10 |
| | | VERSION 07 | STATUS RE | |

STEP 5: ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER PLATES KITS (XP-2525) .
 ATTACH TIE BACK PIPES (MT546120120) TO FACE PIPES USING ROUND CROSSOVER PLATES KITS (XP-R).



ALLOWABLE TIEBACK ANGLE
 ± 15 DEGREES VERTICAL
 ± 25 DEGREES HORIZONTAL



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| | | 07 | RE | D |
| | | | | SHEET 9 OF 10 |

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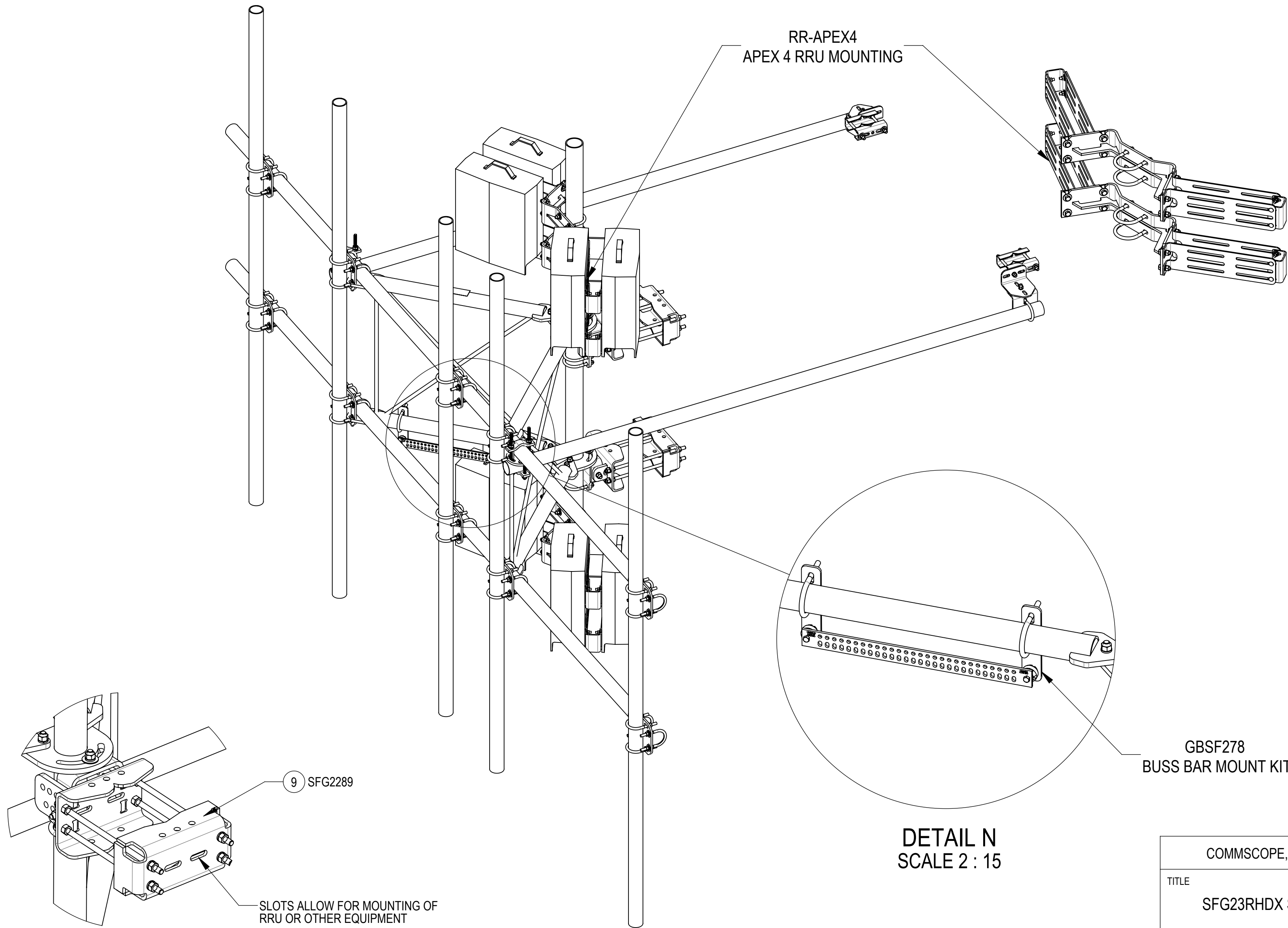
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NOT ALL MATERIALS ARE INCLUDED WITH ITEMS SHOWN ON THIS PAGE
SEE RESPECTIVE PART NUMBER DRAWING BOM FOR DETAILS

ACCESSORIES ORDERED SEPARATELY:



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|--|---------------|---------------------------|--------|----------|
| COMMSCOPE, INC. OF NORTH CAROLINA | | | | |
| TITLE SFG23RHDX SECTOR FRAME SERIES | | | | |
| SIZE C | SCALE 1:12 | DOCUMENT NO. SFG23RHDX | | |
| | | DRAWING | | SHEET |
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