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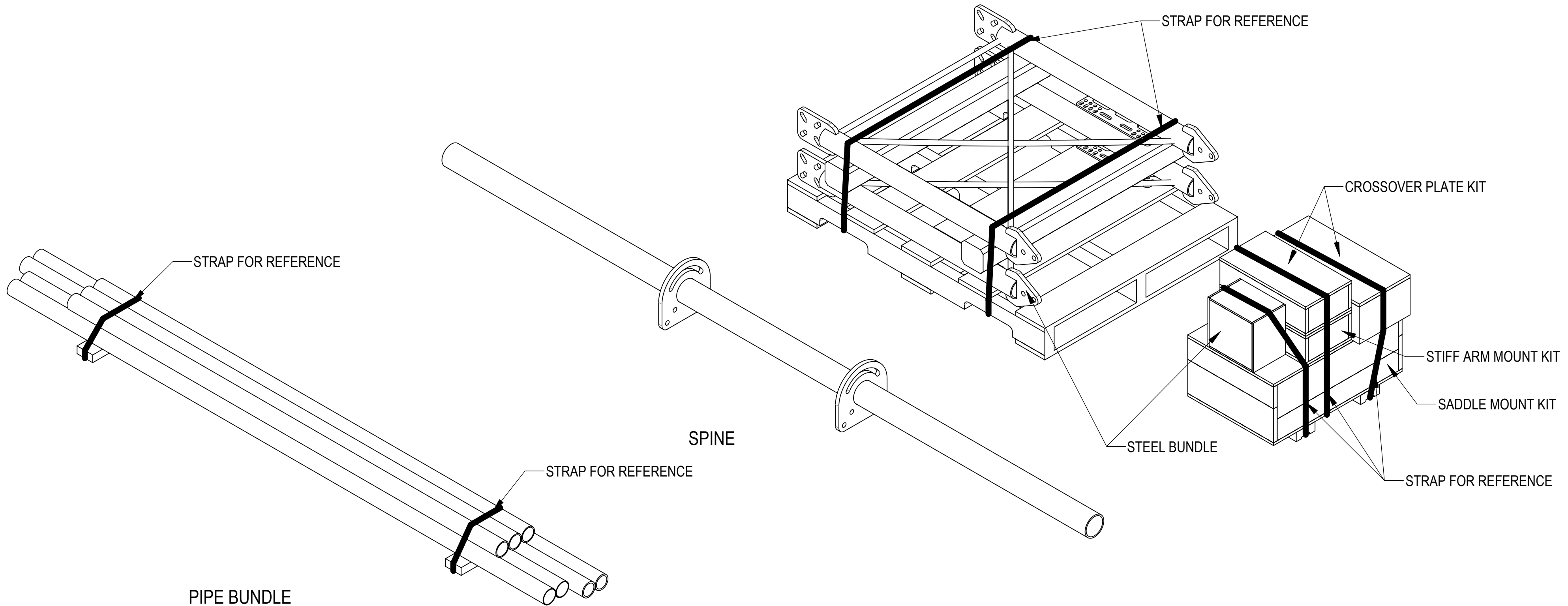
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- 1.0 GENERAL NOTES
 - 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
 - 1.2 FOR PATENT INFO: <https://www.cs-pat.com>
- 2.0 DESIGN NOTES
 - 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING 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 MAY BE SUPPLIED, BAGGED AND SHIPPED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
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
E	SHEET2: ADDED SFG2398 TO TABLE 1; SHEET5: ADDED LABEL INSTALLATION NOTICE	JL1183 17NOV23	YW1045 40183325CMO
F	UPDATED SFG23175 TO ADD UNIVERSAL INTERFACE PLATES; ADDED SFG23RHDX-11-3-120, SFG23RHDX-13-B, SFG23RHDX-13-4-120, SFG23RHDX-15-B, SFG23RHDX-15-4-120 & SFG23RHDX-15-5-120 TO SERIES; CHG PALLET FROM 62X38PALLET TO PALLET48X36 TO MATCH WITH SAP BOM	RY1002 03SEP24	XK1001 40202713CMO
G	UPDATED EPA TABLE	YMENG 12DEC24	CB1094 40210882CMO



COMMSCOPE, INC. OF NORTH CAROLINA													
TOLERANCES						SAP MATERIAL MASTER							
0 PLACE		X[X] ± 0.2[5]		2 PLACE		.XX[X] ± 0.06[1.5]		SEE TABLE 1					
1 PLACE		.X[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 ES1081		12/15/20		SFG23RHDX SECTOR FRAME SERIES								
	RW YMENG		12/13/2024										
	AD CB1094		12/17/2024		SCALE		DOCUMENT NO.						
	RE YMENG		12/17/2024		1:18		SFG23RHDX						
ECN 40210882CMO													
SIZE		Auth Group		INSL		MODEL			DRAWING			SHEET 1 OF 12	
C		⊕		◁		VERSION			REVISION				
						06			RE E 10				

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

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1

PART NUMBERS, WEIGHTS, & EPA

TABLE 1: CONFIGURATIONS

PART NUMBER	DESCRIPTION	WEIGHT (LBS)	MOUNT EPA W/NO ICE (FT²)			MOUNT EPA W/ 1/2" ICE (FT²)			ANTENNA PIPES	INCLUDED PARTS																			
			FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A		SM-U2080HDG23	SFG22HDX-HK01	SFG23RHDH-SB01	SFG2204	XP-2525-6	XP-2525-8	XP-2525-4	XP-2525-OFF-4	PB02TEB0211P	PB02TEB0310K0211P	PB02TEB03TEK0211P	PB02TEB0213P	PB02TEB04TEK0213P	PB02TEB0215P	PB02TEB04TEK0215P	PB02TEB05TEK0215P	SFG2398			
SFG23RHDH-11-B	SF,11',BASE-KIT	626.55							-	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
SFG23RHDH-11-3-126	SF,11',(3)2.88"X126"-PIPES-PIM-SPACED	859.91	9.63	9.42	22.86	13.53	13.62	32.59	3	1	1	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
SFG23RHDH-11-3-120	PG,SF,11'FP,(3)120"AP	849.13							3	1	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SFG23RHDH-13-B	SF,13'FP,NOAP	657.30							-	1	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
SFG23RHDH-13-4-120	PG,SF,13'FP,(4)120"AP	954.08	10.69	9.42	24.13	14.94	13.62	34.28	4	1	1	1	1	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1
SFG23RHDH-15-B	SF,15'FP,NOAP	688.06							-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
SFG23RHDH-15-4-120	PG,SF,15'FP,(4)120"AP	1022.97	11.76	9.42	25.41	16.36	13.62	35.97	4	1	1	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	1	-	1
SFG23RHDH-15-5-120	PG,SF,15'FP,(5)120"AP	1059.02							5	1	1	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1

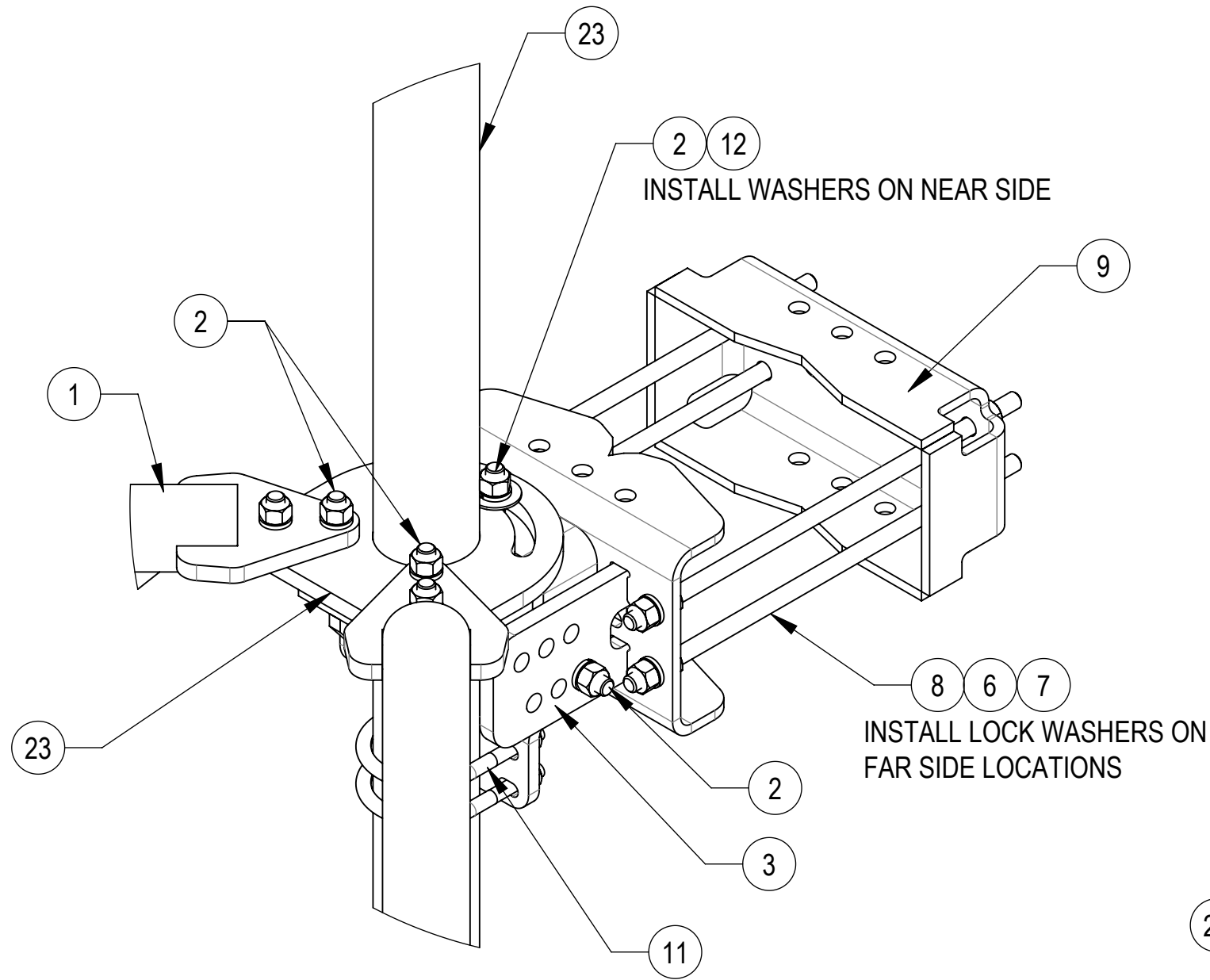
- NOTES:
 1. NO MOUNT PIPES CONSIDERED. IF DESIRED, ADD ANTENNA PIPE PER TABLE 2
 2. MOUNT CONNECTION MEMBERS TO TOWER CONSIDERED.
 3. 3-SECTOR EPA INCLUDES KA FACTORS.

TABLE 2: EPA OF EACH ANTENNA PIPE

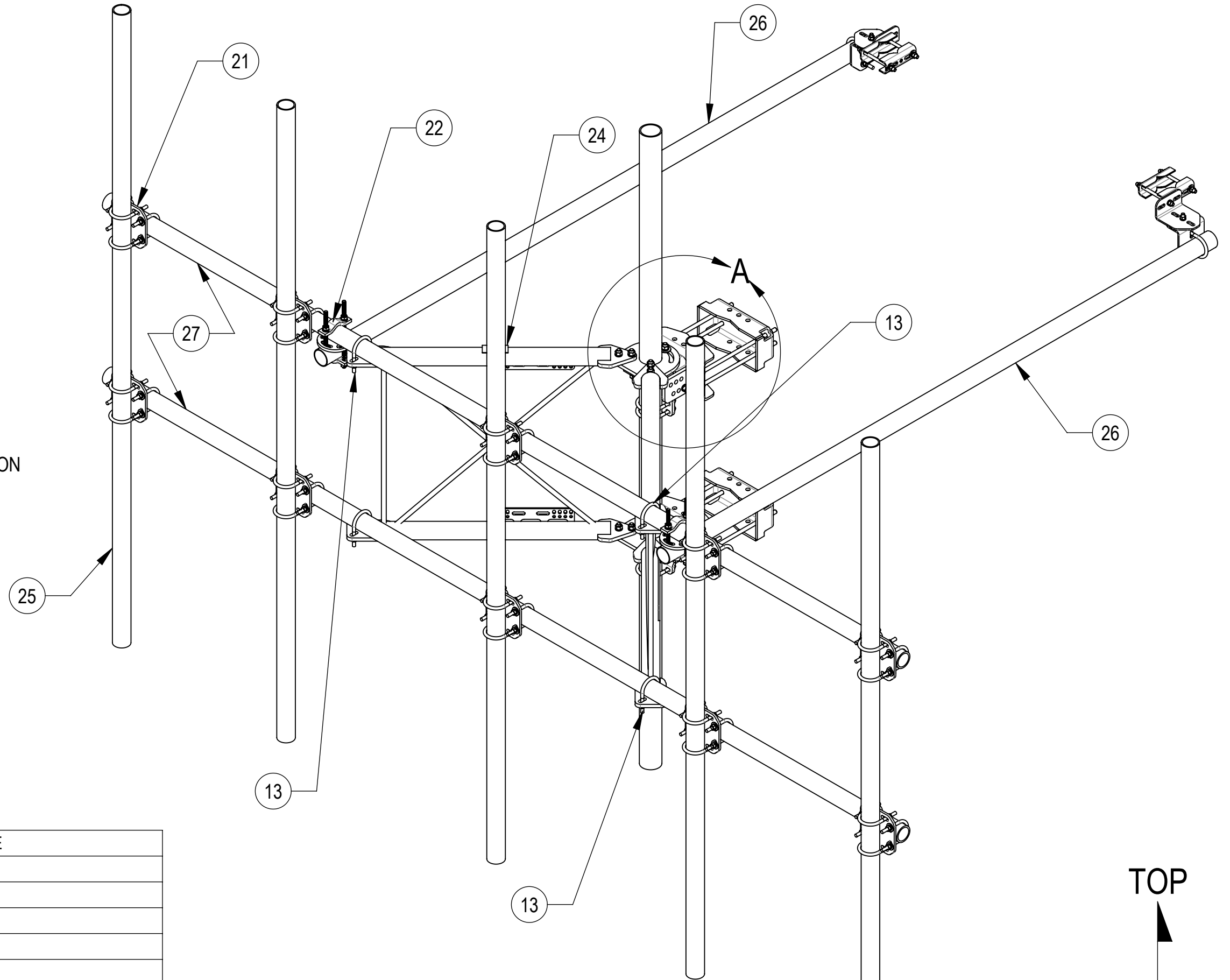
ANTENNA PIPE	MOUNT EPA W/NO ICE (FT²)			MOUNT EPA W/ 1/2" ICE (FT²)		
	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A
2-7/8" X 96"	2.07	2.07	1.84	2.79	2.79	2.48
2-7/8" X120"	2.59	2.59	2.30	3.49	3.49	3.10
2-7/8" X126"	2.72	2.72	2.42	3.67	3.67	3.26

- NOTE:
 1. ANTENNA PIPES ARE CONSIDERED SEPARATELY.
 2. KA FACTOR OF 3-SECTOR EPA INCLUDED.
 3. COMBINE THE ASSOCIATED EPA VALUES IN THE TABLES ABOVE TO DETERMINE THE EPA OF A MOUNT MODEL WITH A LISTED MOUNT PIPE CONFIGURATION.
 FOR EXAMPLE: SFG23RHDH-10-4-120 HAS A FRONT EPA OF 9.36 FT² WITH NO ICE PLUS 4 ANTENNA PIPES WITH A FRONT EPA OF 4X2.59=10.36 FT² WITH NO ICE.
 SO, THE TOTAL FRONT EPA SHOULD BE 19.72 FT²; (SIDE EPA SAME METHOD AS FRONT EPA).
 WHEN 3 SECTOR FRAMES ARE MOUNTED AT THE SAME RELATIVE ELEVATION IN AN ARRANGEMENT, IT HAS A 3-SECTOR EPA OF 22.53 FT² WITH NO ICE PLUS 4 ANTENNA PIPES WITH A 3-SECTOR EPA OF (4X2.30)X3=27.60 FT² WITH NO ICE. SO, THE TOTAL 3-SECTOR EPA SHOULD BE 50.13 FT².

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG23RHDH SECTOR FRAME SERIES				
SIZE C	SCALE 1:12	DOCUMENT NO. SFG23RHDH		
DRAWING				SHEET
VERSION 10		STATUS RE	REVISION G	3 OF 12



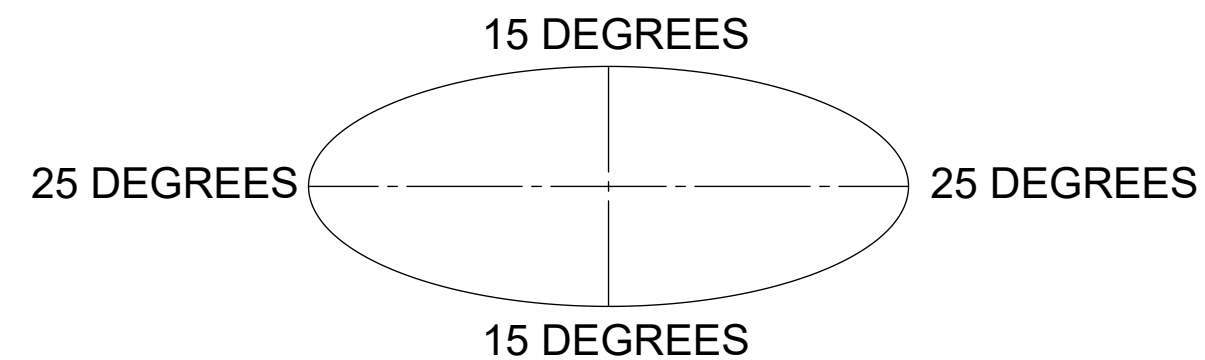
DETAIL A
SCALE 1 : 5



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



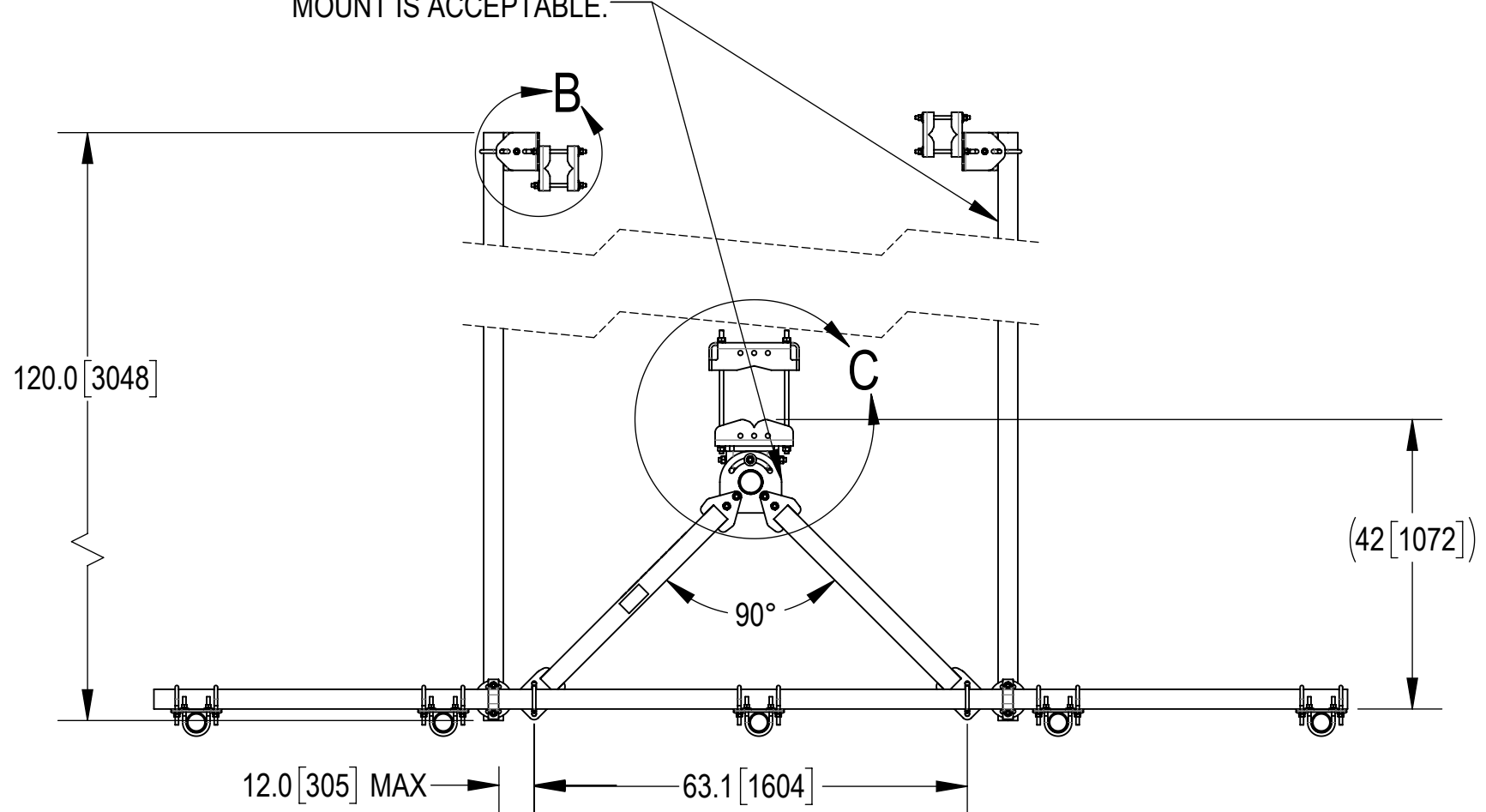
TOP
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BOTTOM

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

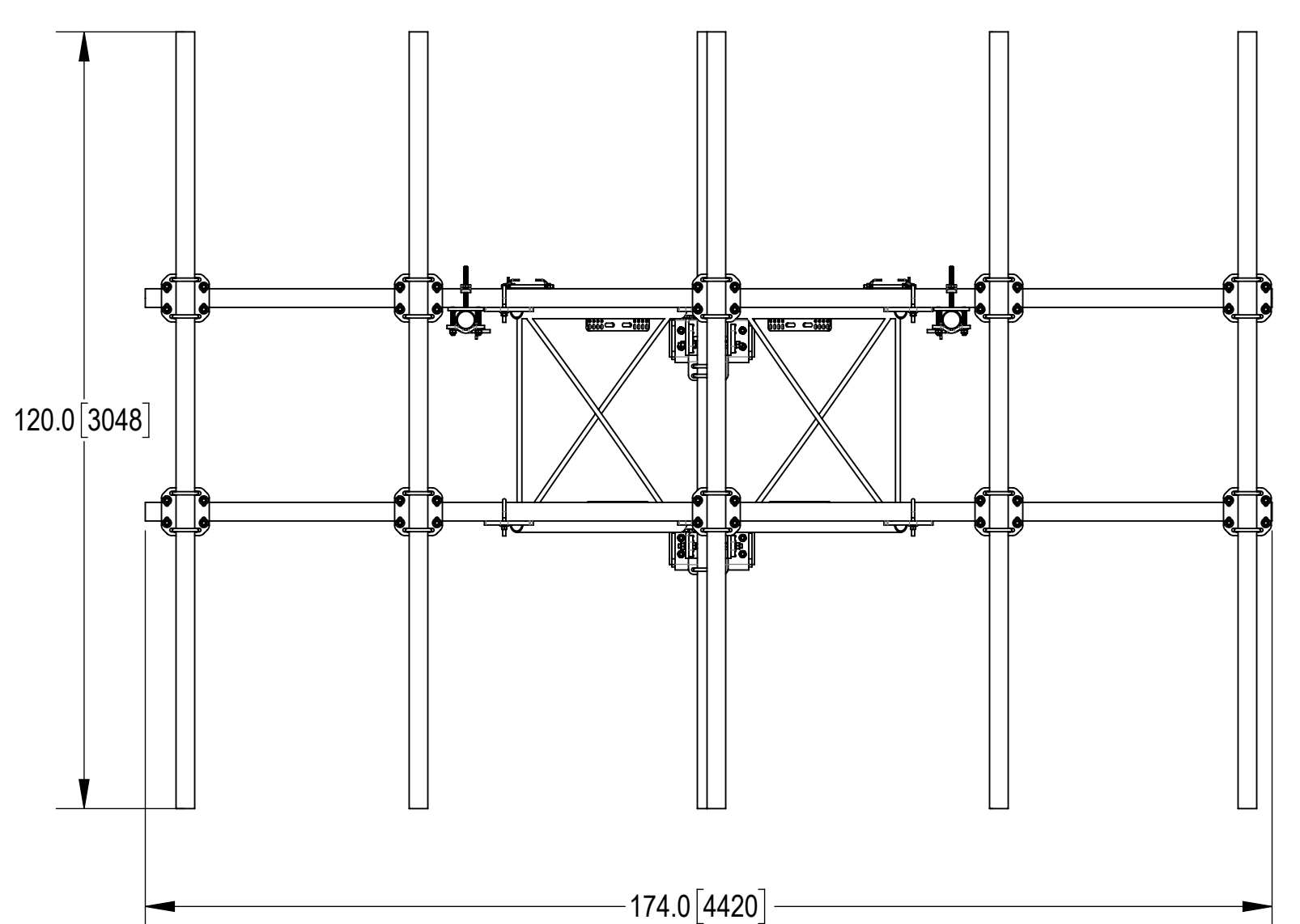
ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE
1	SFG23175	ARM STANDOFF SFG23	2	66.67 LBS	
2	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	14	0.28 LBS	
3	SFG2380	WELDMENT, HD, TOP TAPER BRACKET	1	22.78 LBS	
4	SFG2386	WELDMENT, SFG2 AZIMUTH BRACKET	1	10.07 LBS	
5	SFG2397-00	WELDMENT, G23 AZIMUTH BRACKET	1	7.94 LBS	
6	GN-05	5/8" GALV HEX NUT	24	0.08 LBS	
7	GN-05	5/8" GALV FLAT 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

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TITLE SFG23RHDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:16	DOCUMENT NO. SFG23RHDX		
DRAWING		VERSION	STATUS	REVISION
		10	RE	G
				SHEET 4 OF 12

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.

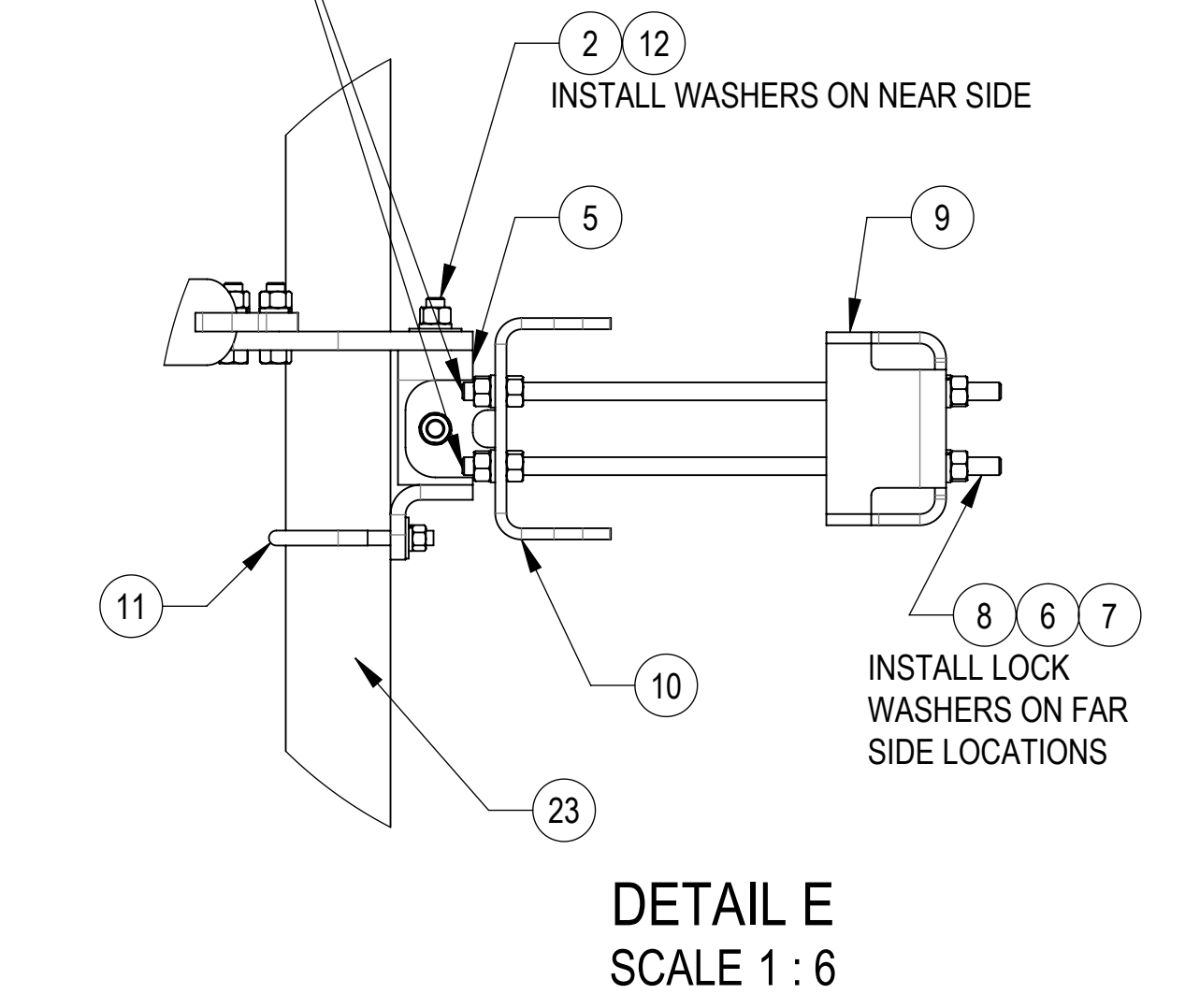
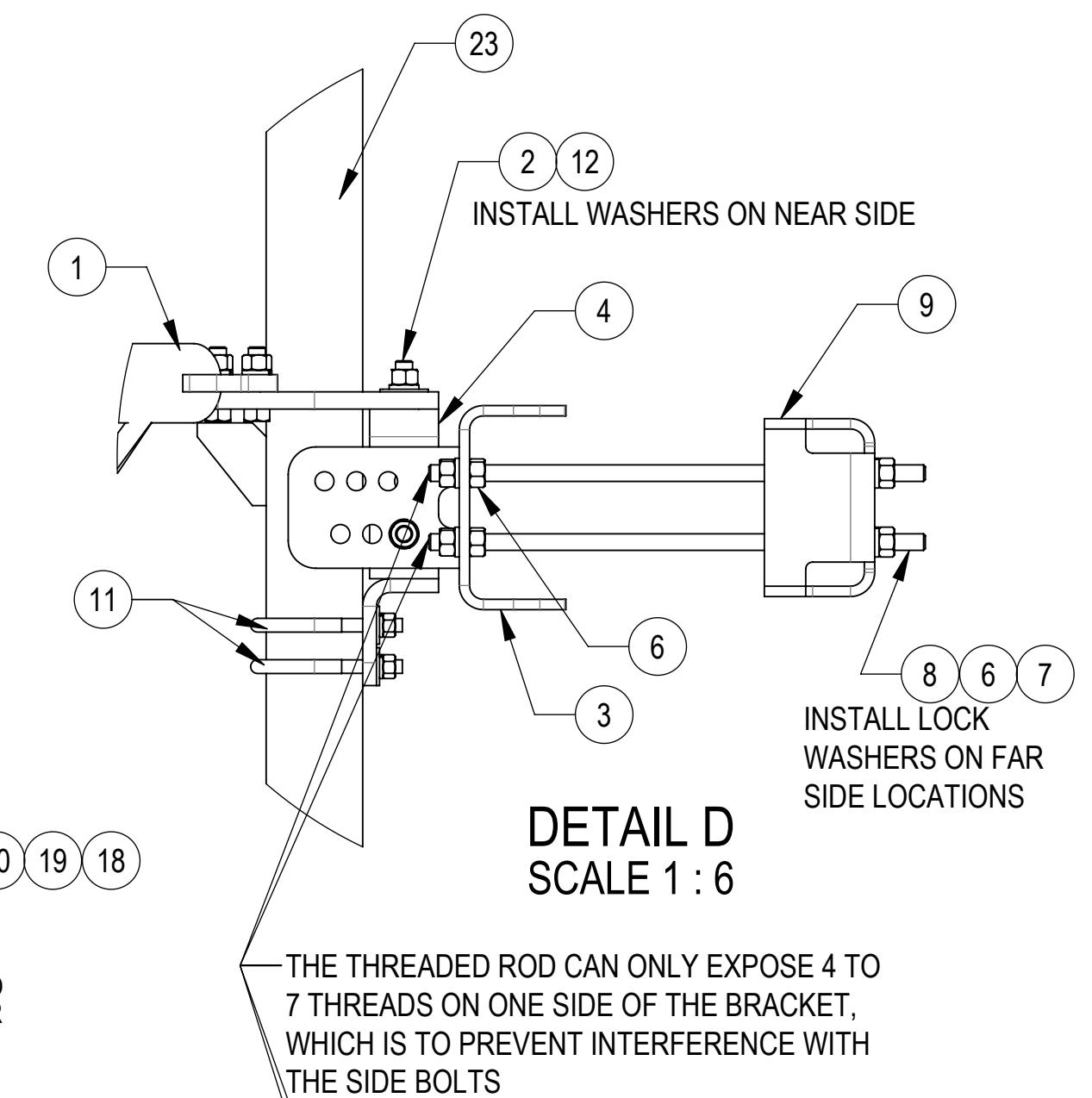
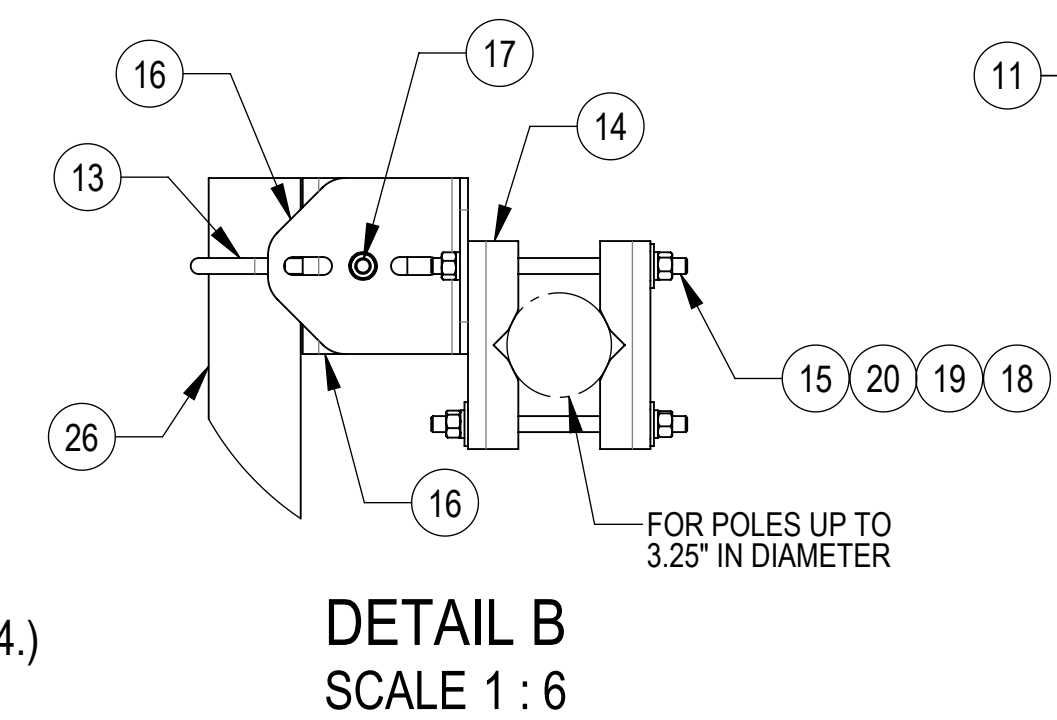
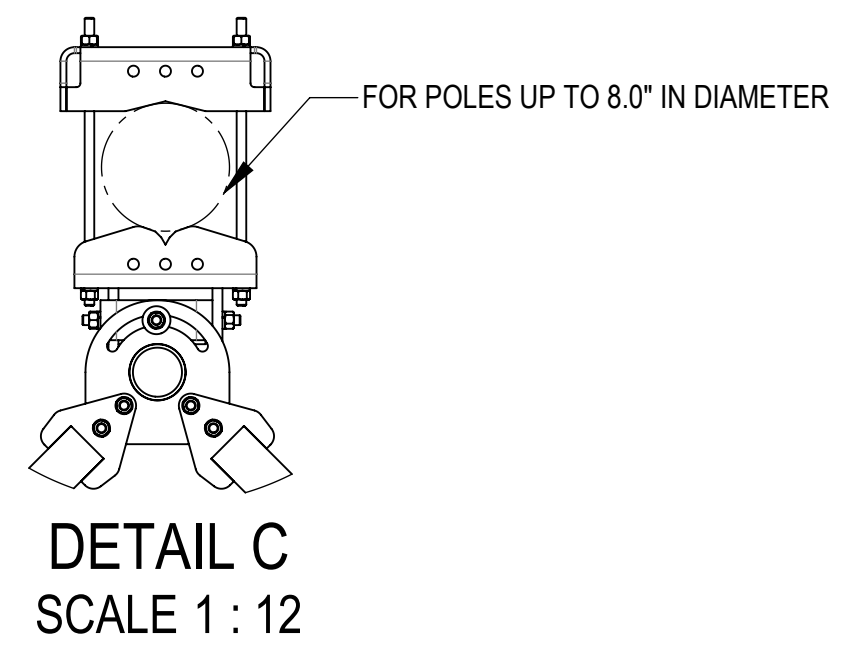
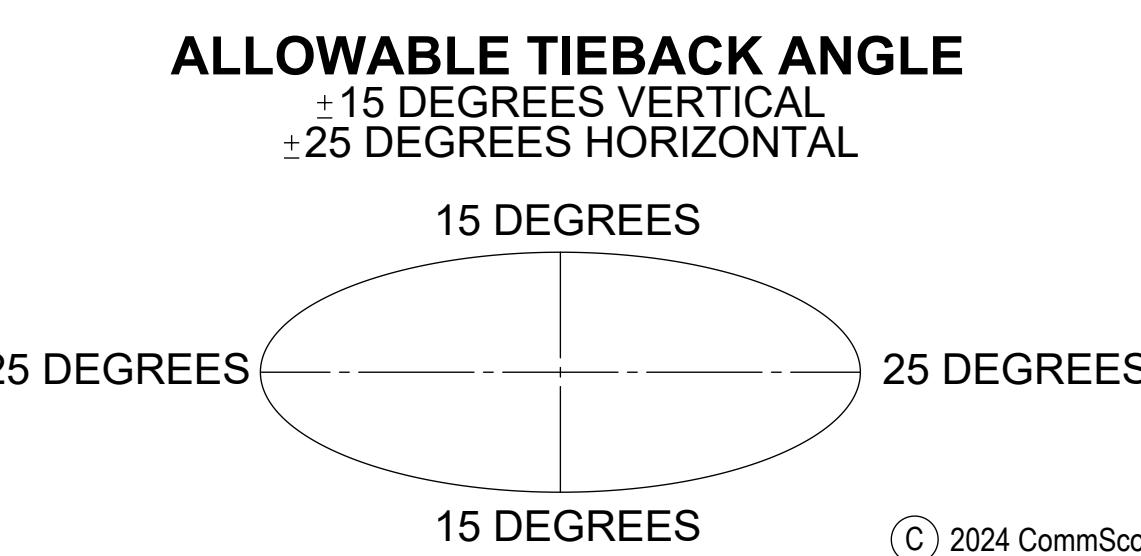


SFG23RHDX-14-5-120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE ON PAGE 4.)



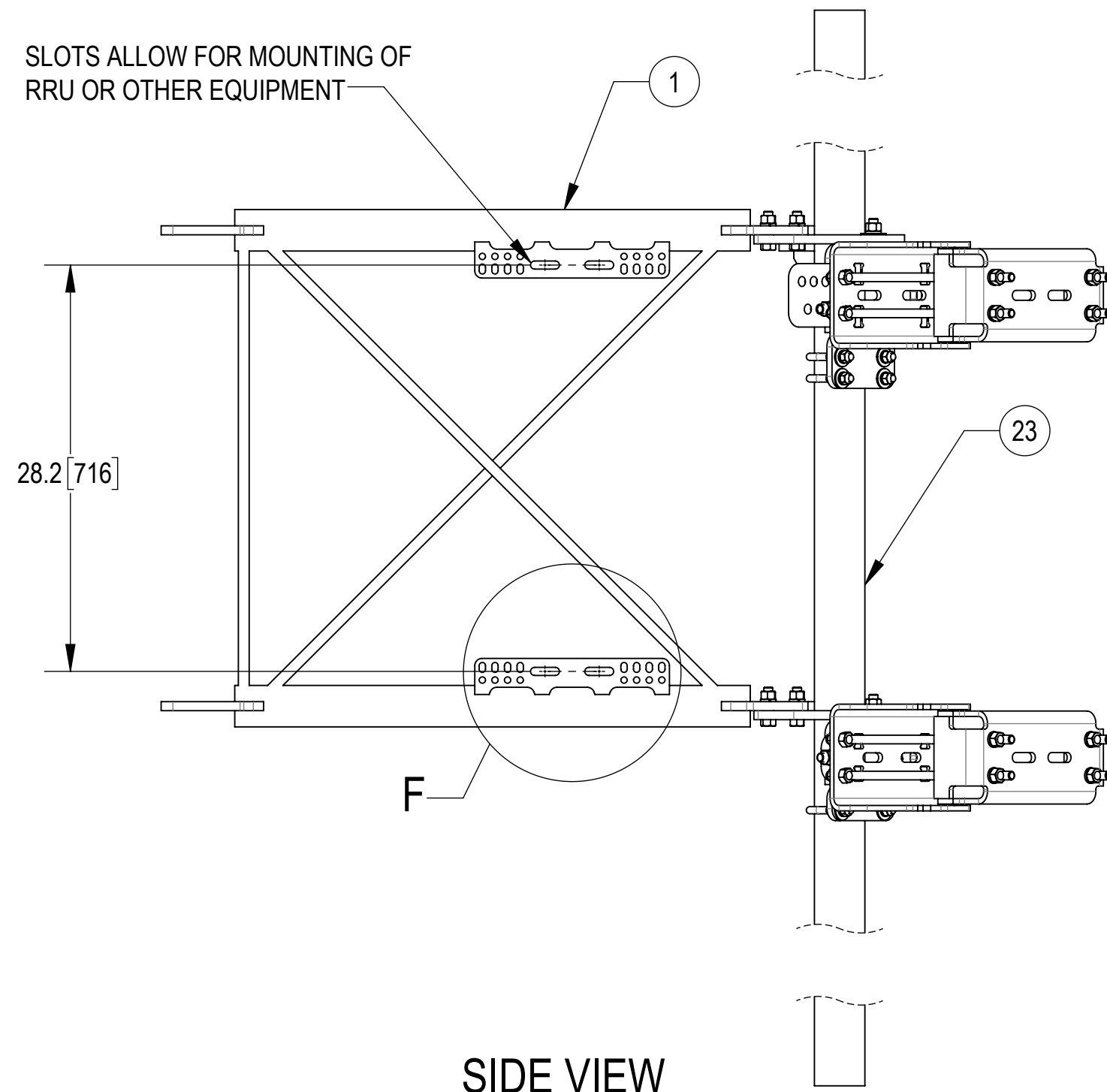
TOP

BOTTOM

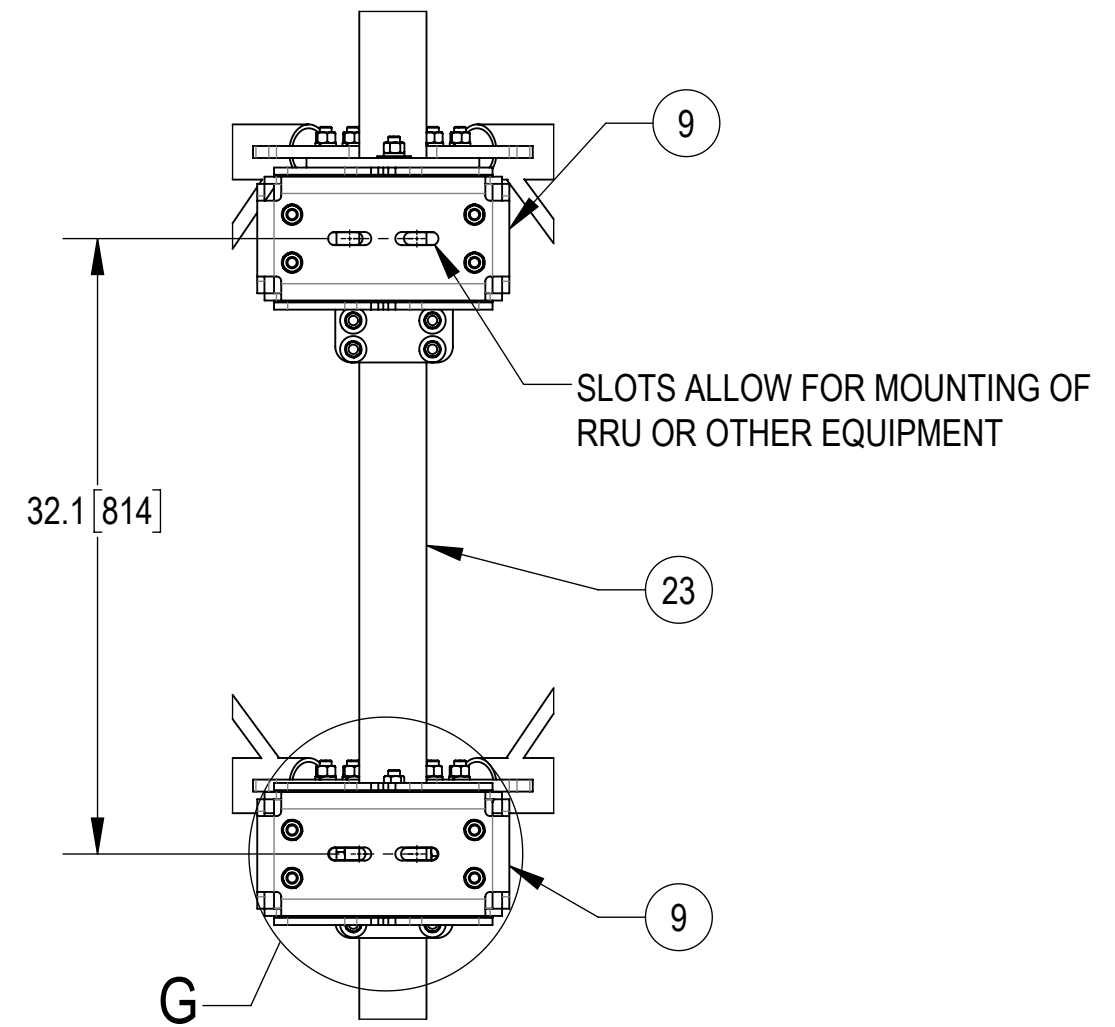


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		VERSION	STATUS	REVISION
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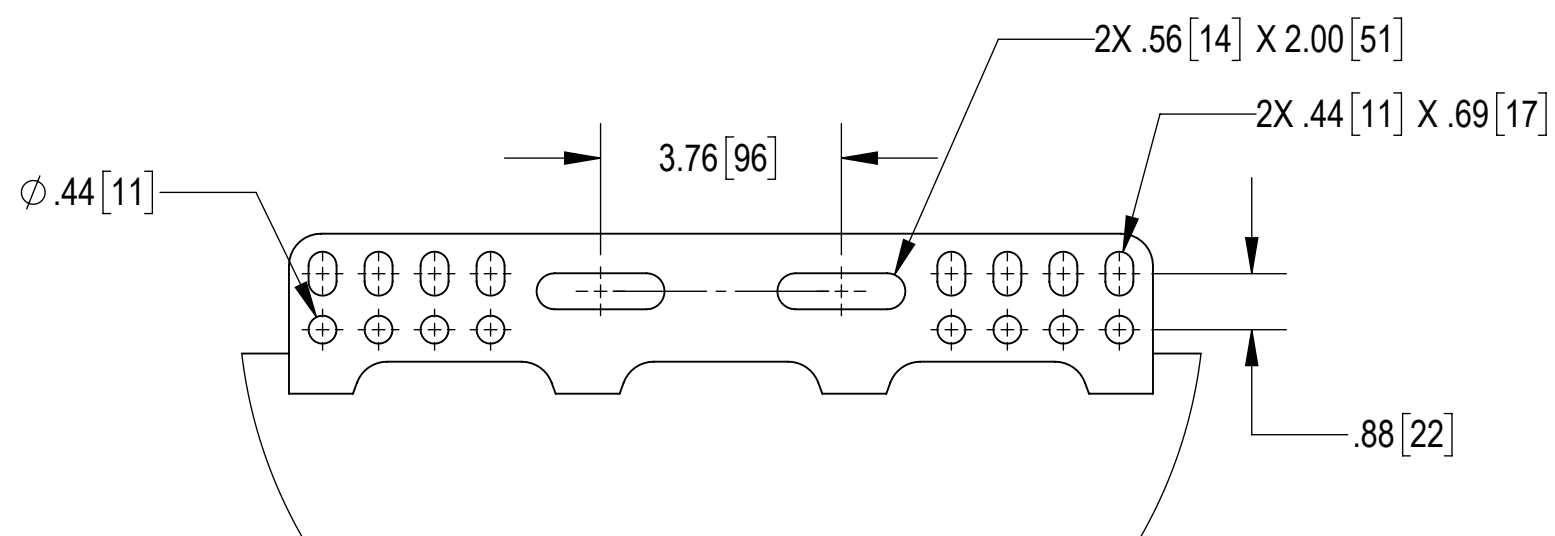
SLOTS ALLOW FOR MOUNTING OF RRU OR OTHER EQUIPMENT



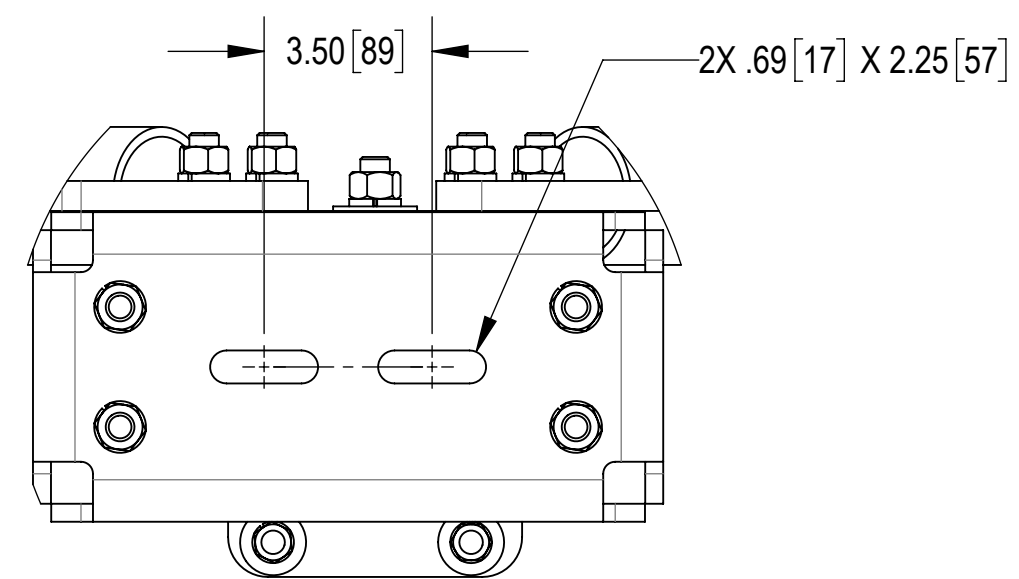
SIDE VIEW



BACK CROP VIEW



DETAIL F
SCALE 1 : 3



DETAIL G
SCALE 1 : 4

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TITLE
SFG23RHDX SECTOR FRAME SERIES

SIZE C	SCALE 1:10	DOCUMENT NO. SFG23RHDX			
		DRAWING			SHEET 6 OF 12
		VERSION 10	STATUS RE	REVISION G	

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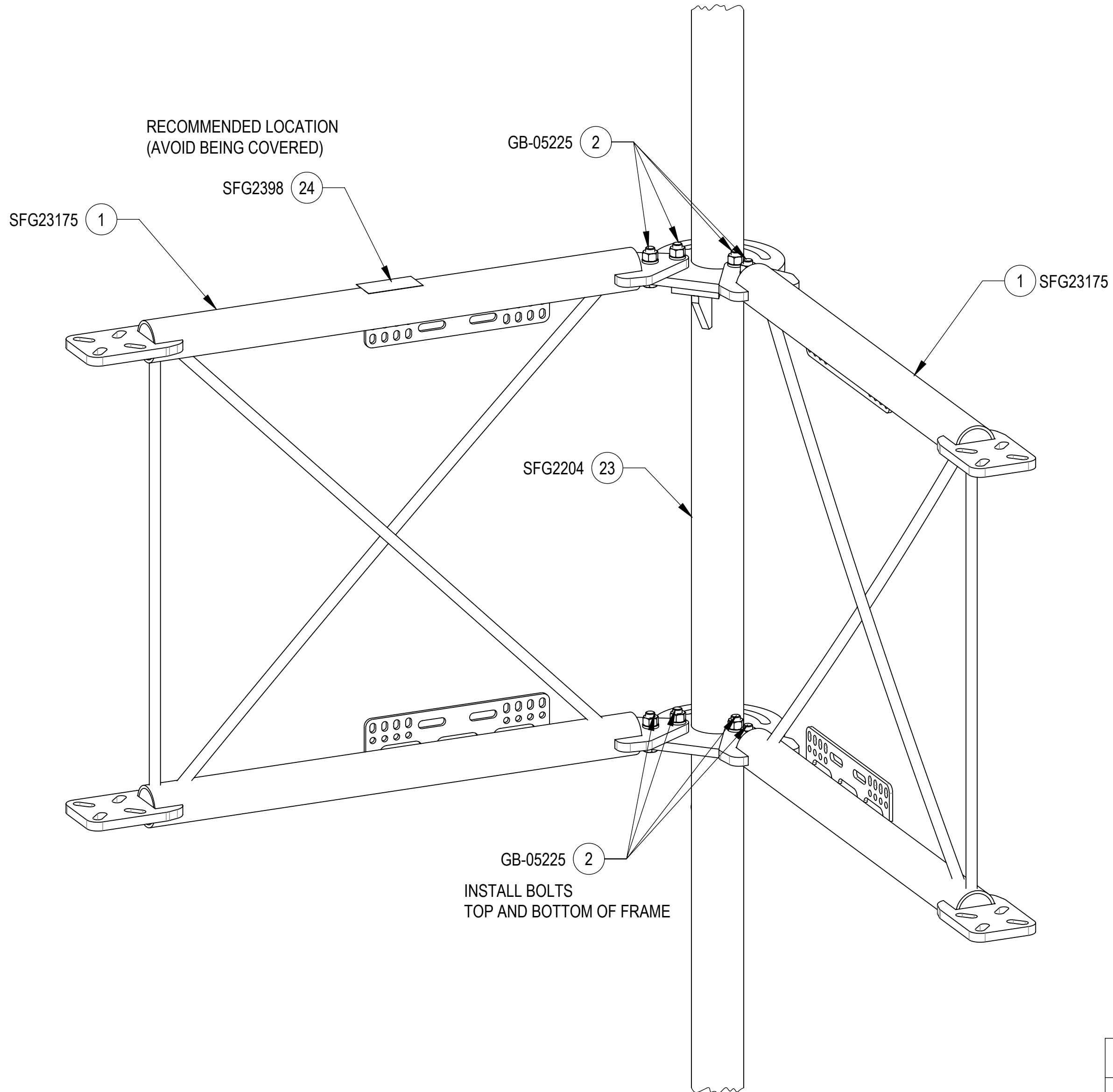
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INSTALLATION SEQUENCE - REFERENCE ONLY

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

PLACE LABEL (SFG2398) ON TOP OF STANDOFF ARMS (SFG23175). (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER BEFORE APPLYING LABEL)



ISO VIEW

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG23RHDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:6	DOCUMENT NO. SFG23RHDX		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
		10	RE	G
				7 OF 12

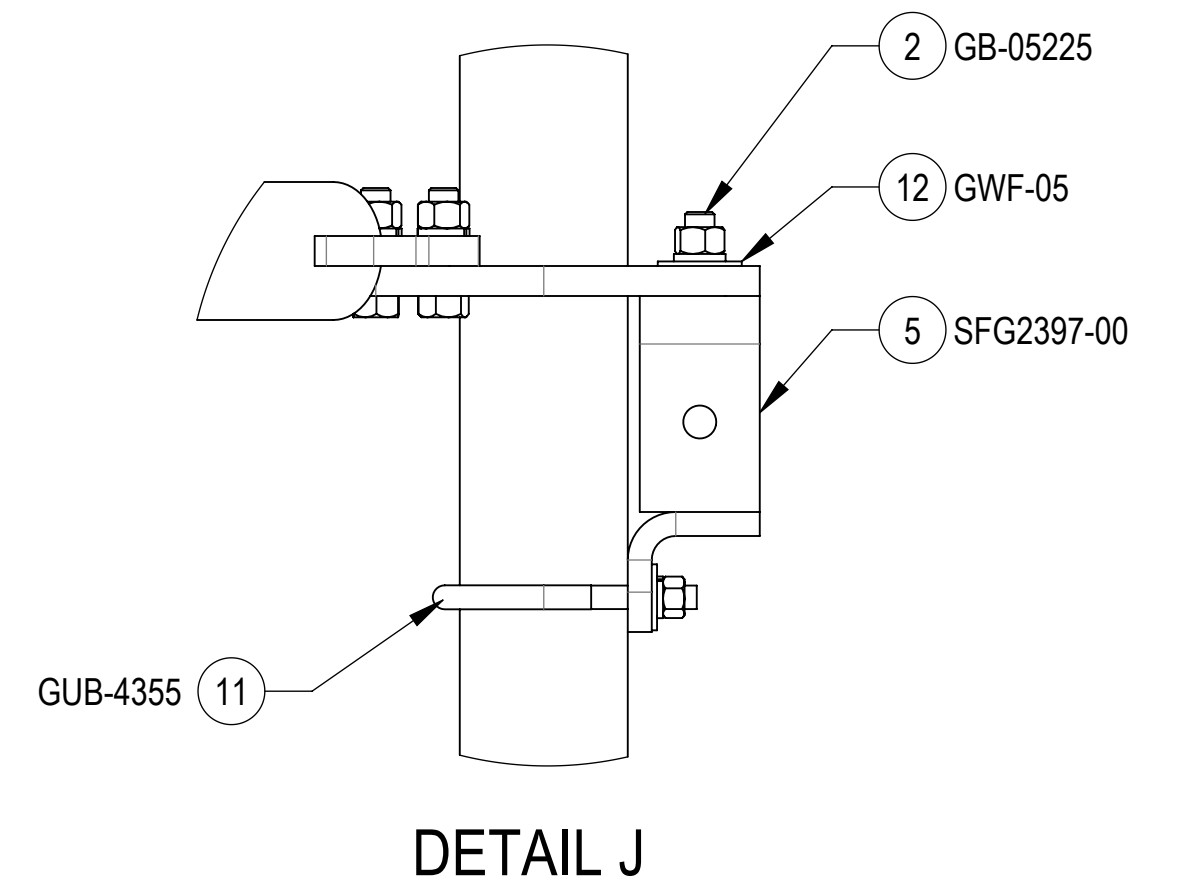
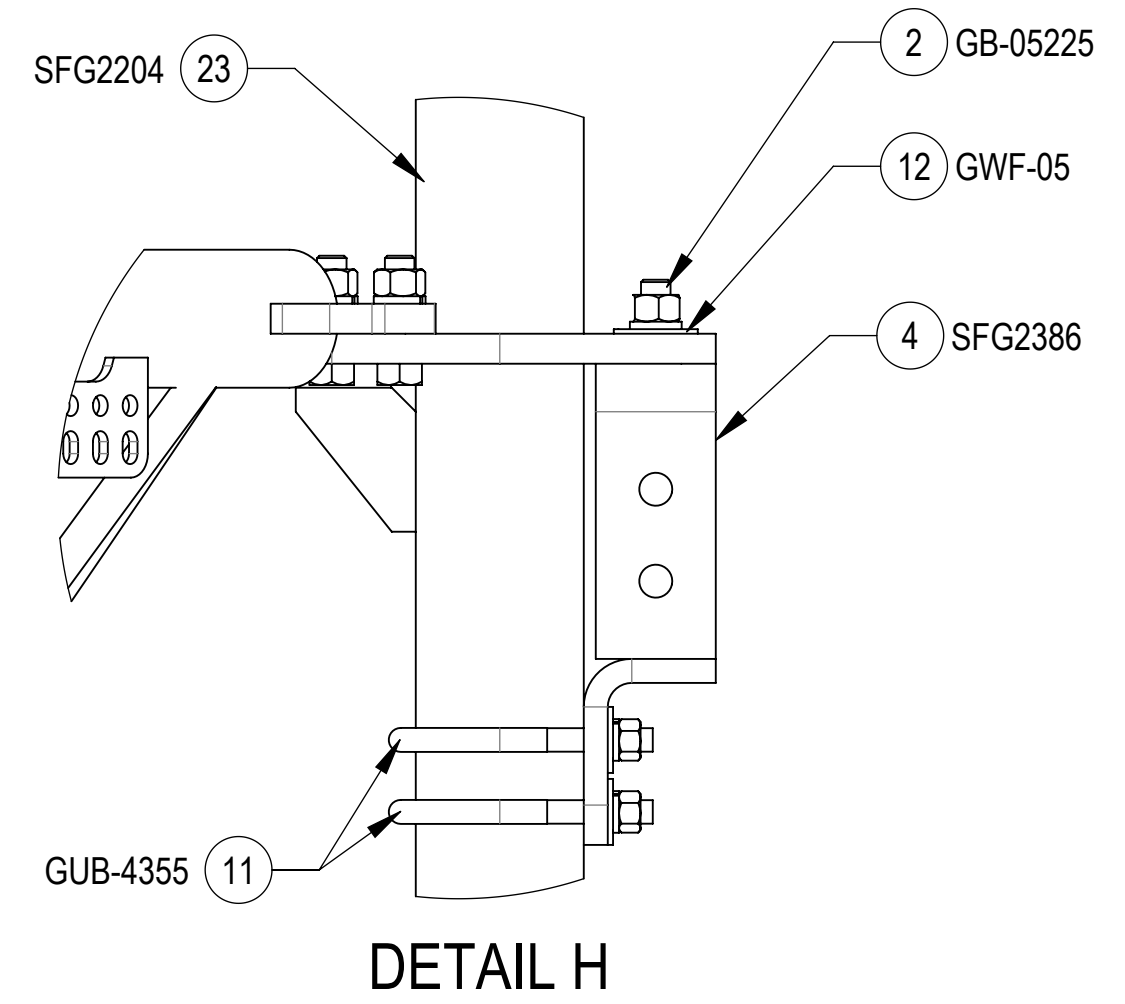
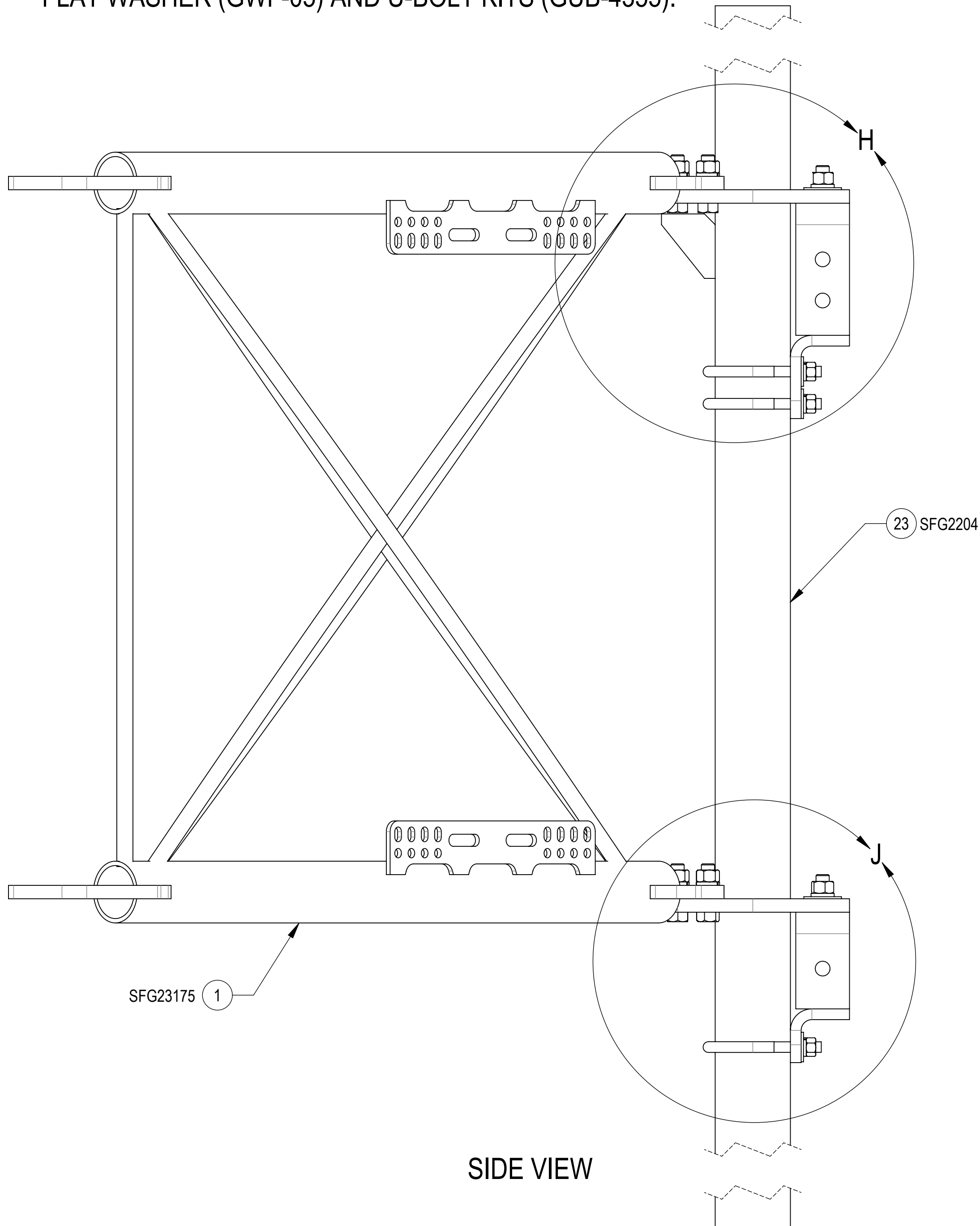
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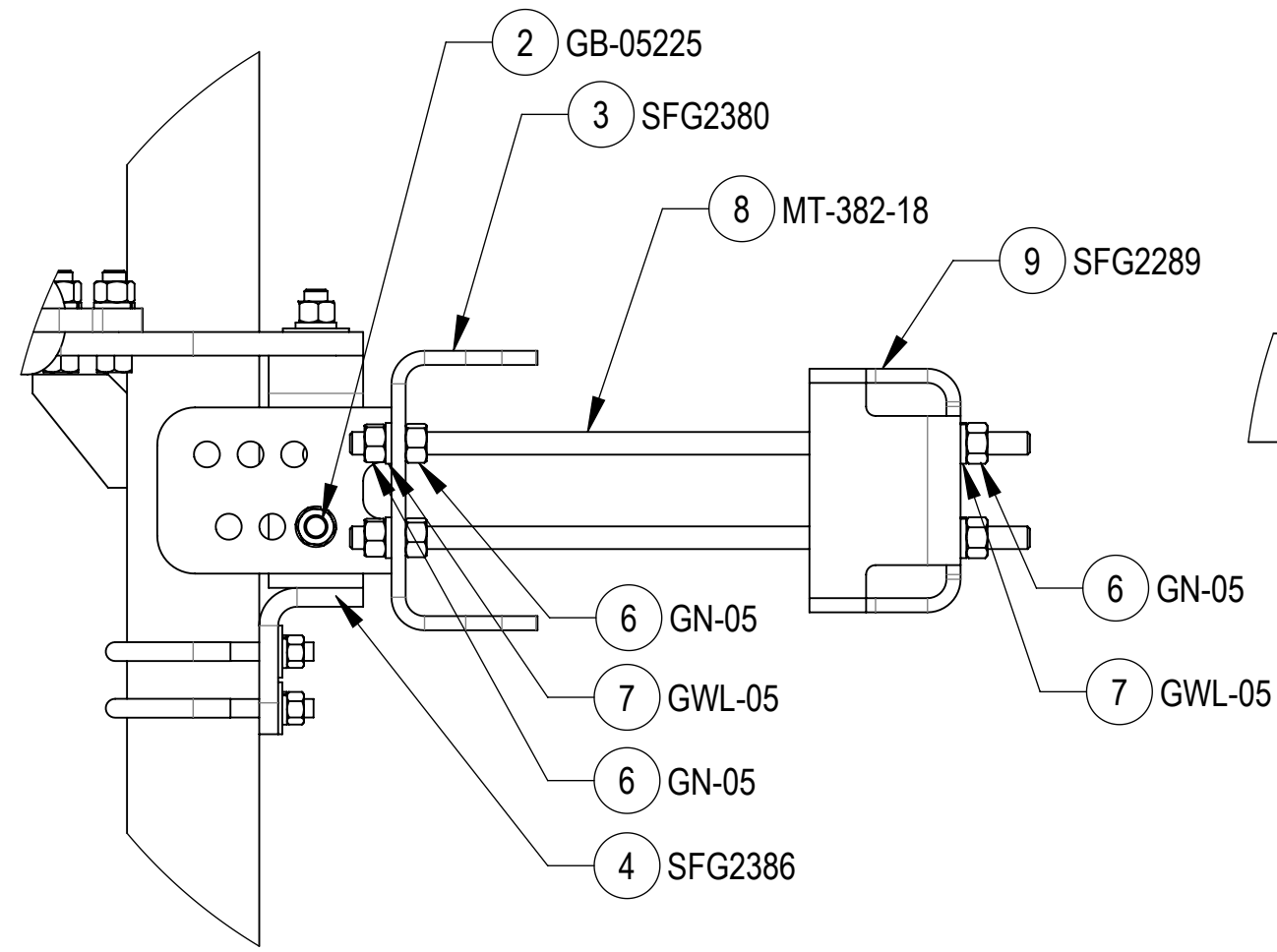
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STEP 2: AT TOP, ATTACH AZIMUTH/TAPER BRACKET (SFG2386) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225),
 FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355);
 AT BOTTOM, ATTACH AZIMUTH/TAPER BRACKET (SFG2397-00) TO BACK VERTICAL ARM MOUNT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

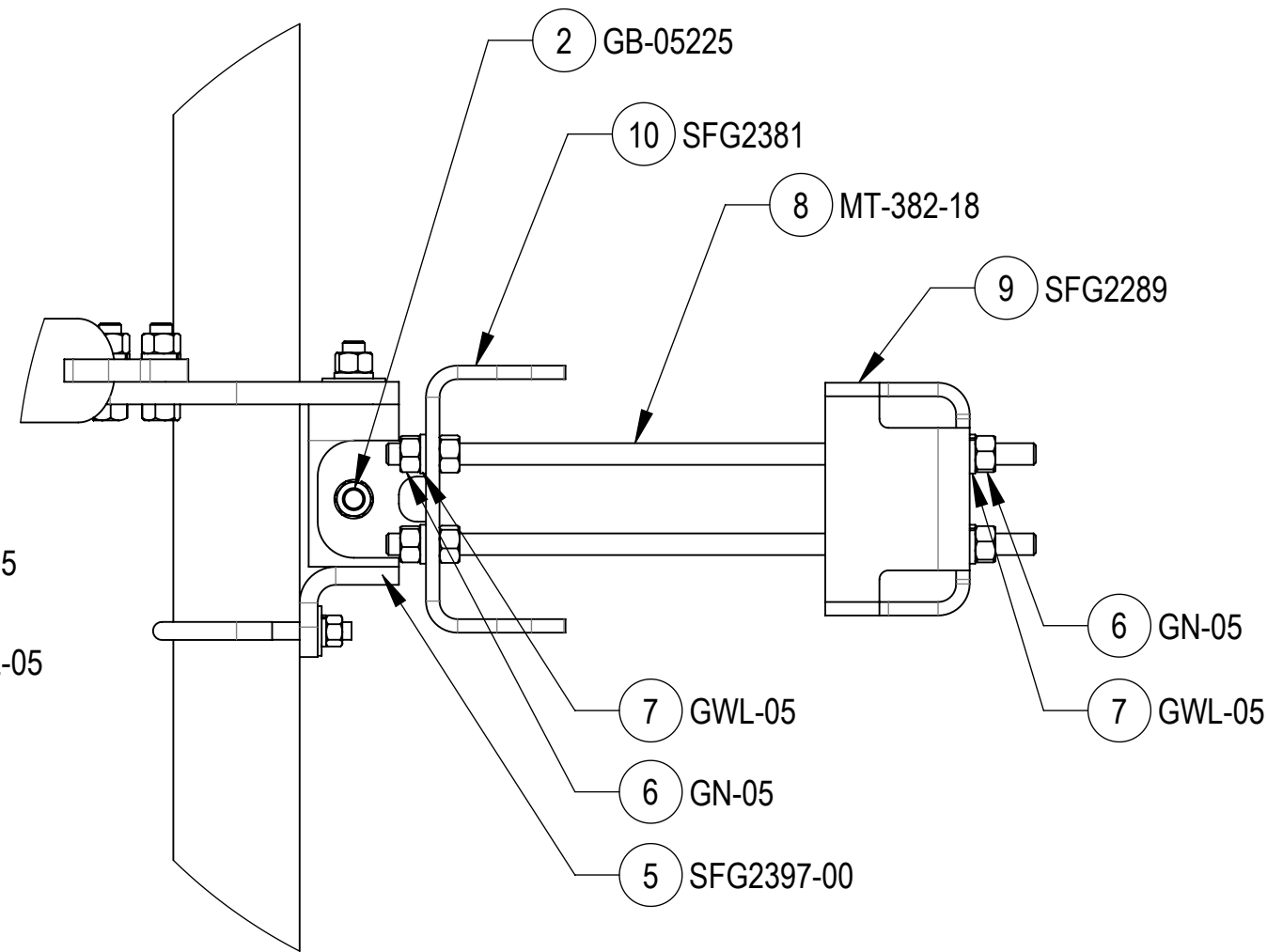


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TITLE SFG23RHDX SECTOR FRAME SERIES				
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DRAWING		REVISION		SHEET
VERSION 10	STATUS RE	REVISION G	8 OF 12	

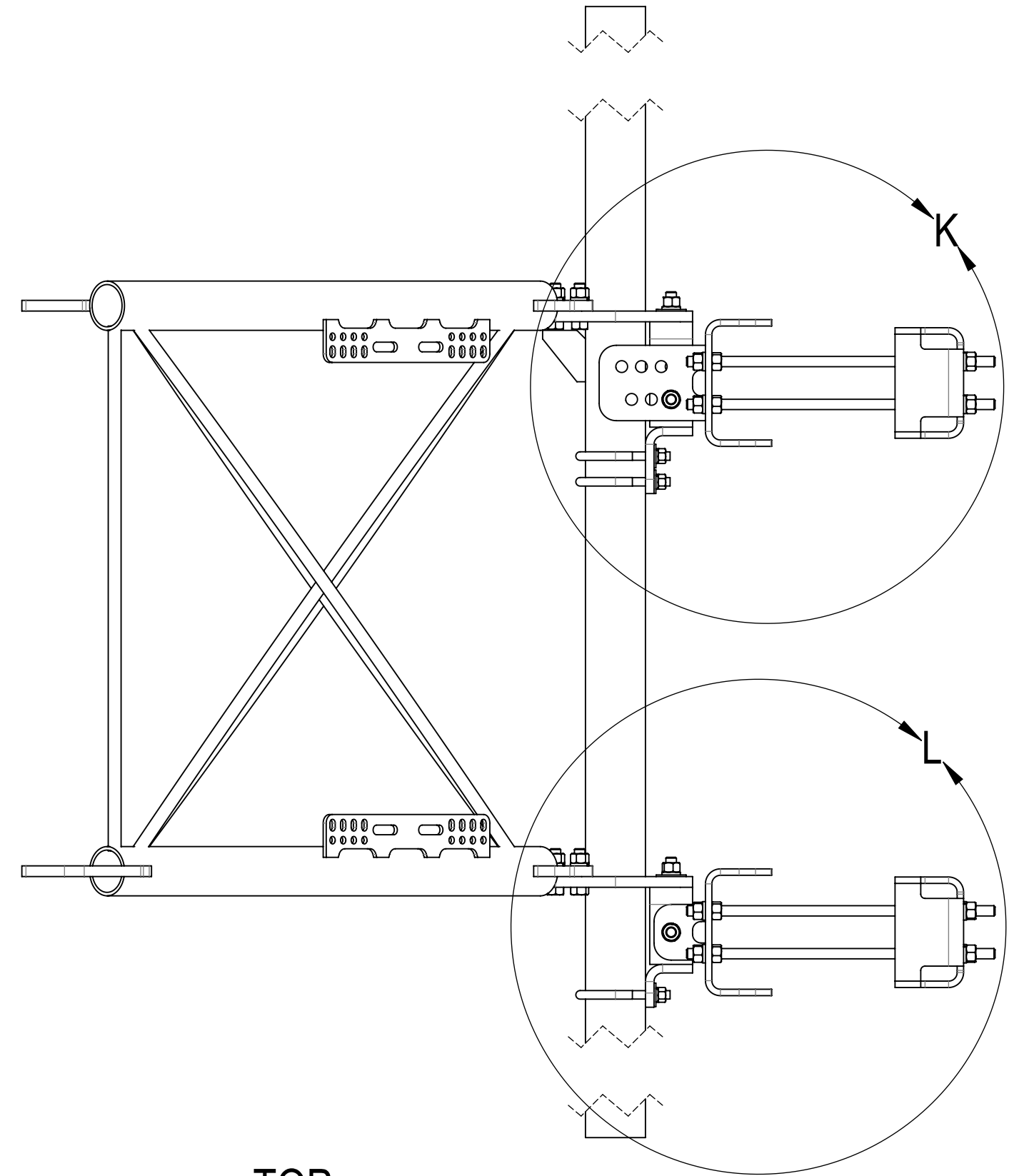
STEP 3: AT TOP, ATTACH TOP TAPER BRACKET (SFG2380) AZIMUTH/TAPER BRACKET (SFG2386) USING BOLTS KITS (GB-05225)
 AT BOTTOM, ATTACH LOWER TOWER LEG BRACKET (SFG2381) TO AZIMUTH/TAPER BRACKET (SFG2397-00) USING BOLTS KITS (GB-05225)



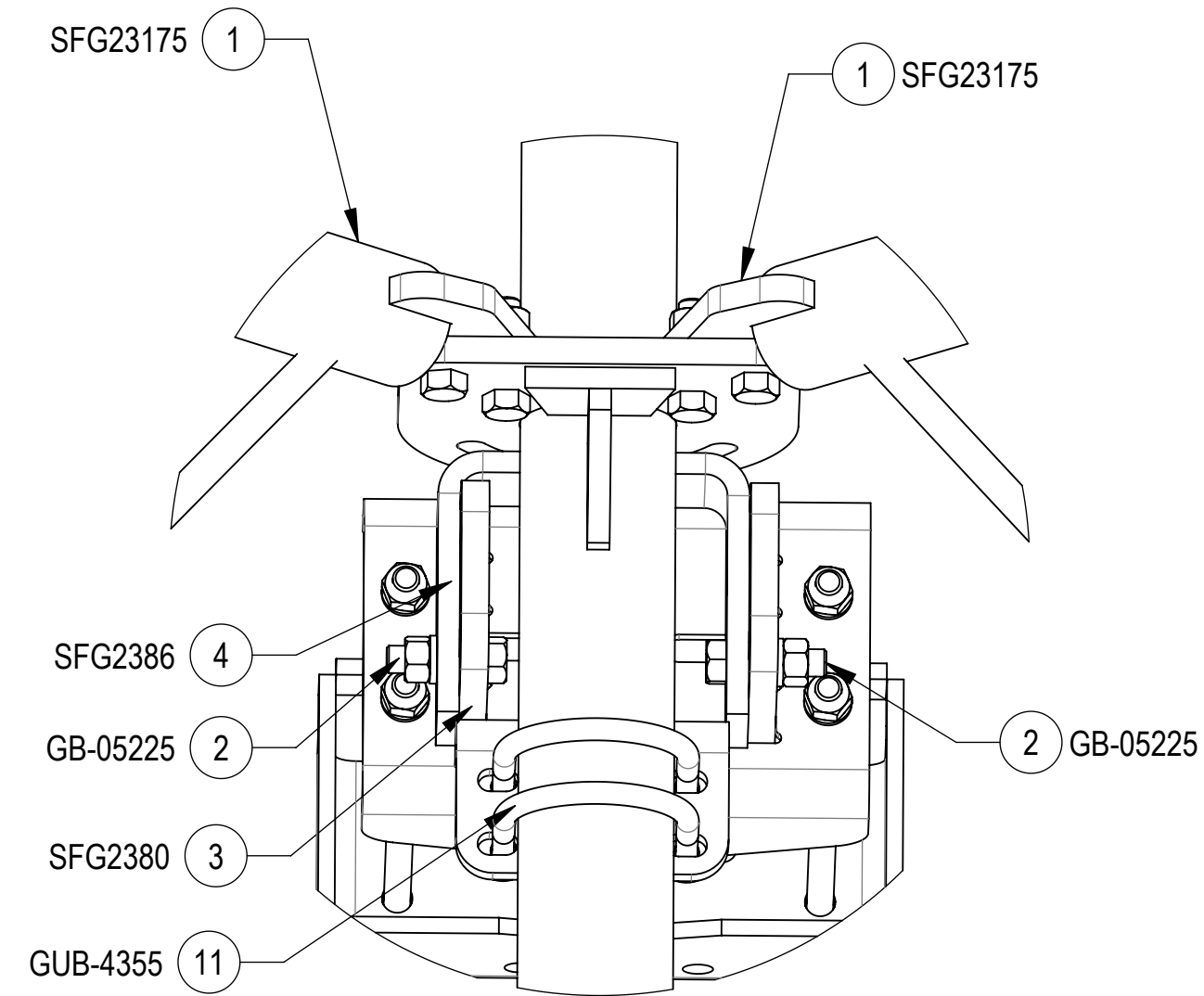
DETAIL K
SCALE 1 : 5



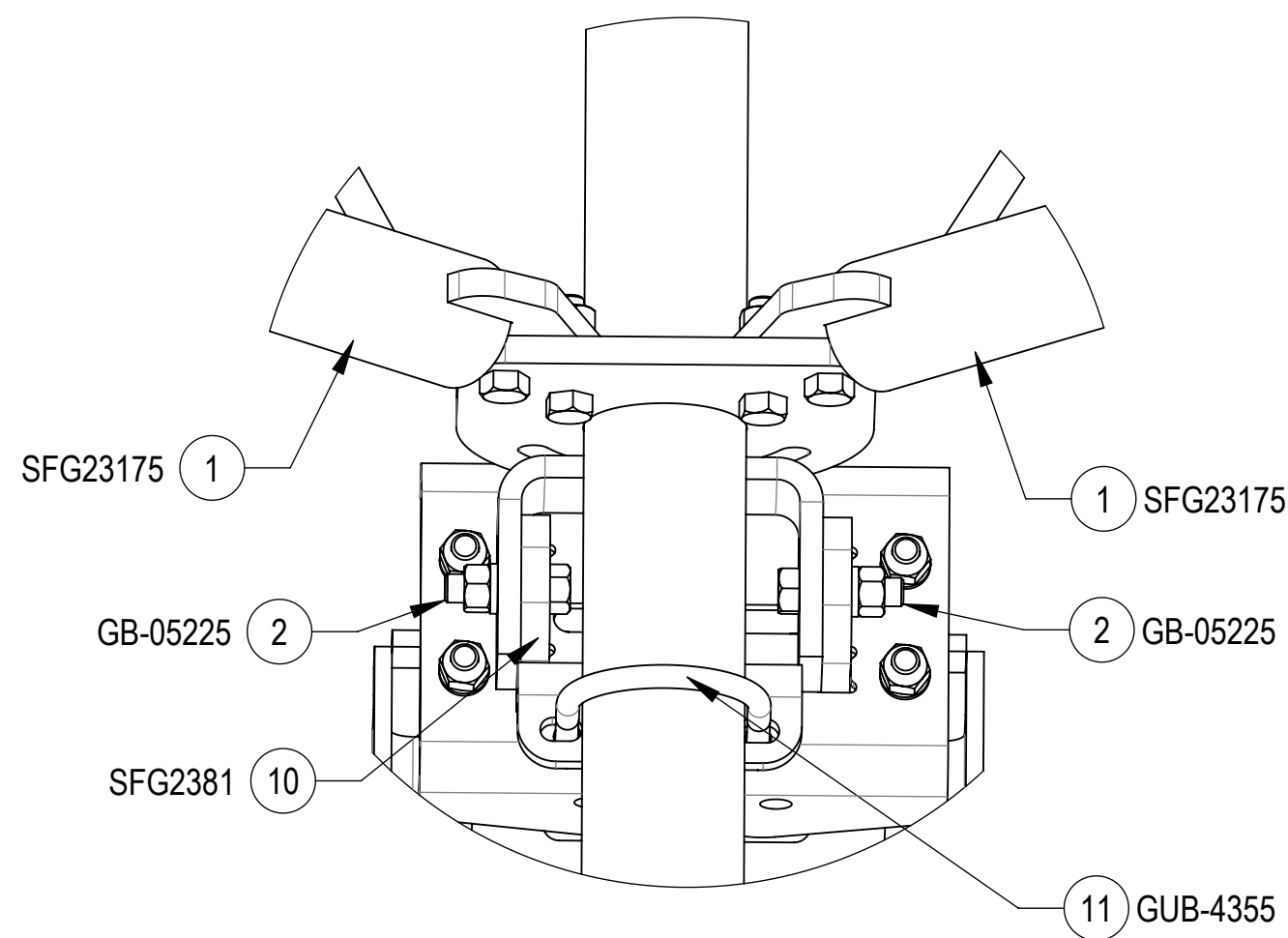
DETAIL L
SCALE 1 : 5



TOP
↓
BOTTOM



DETAIL ISO TOP ROTATED VIEW
SCALE 1 : 4



DETAIL ISO BOTTOM ROTATED VIEW
SCALE 1 : 4

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG23RHDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:6	DOCUMENT NO. SFG23RHDX		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
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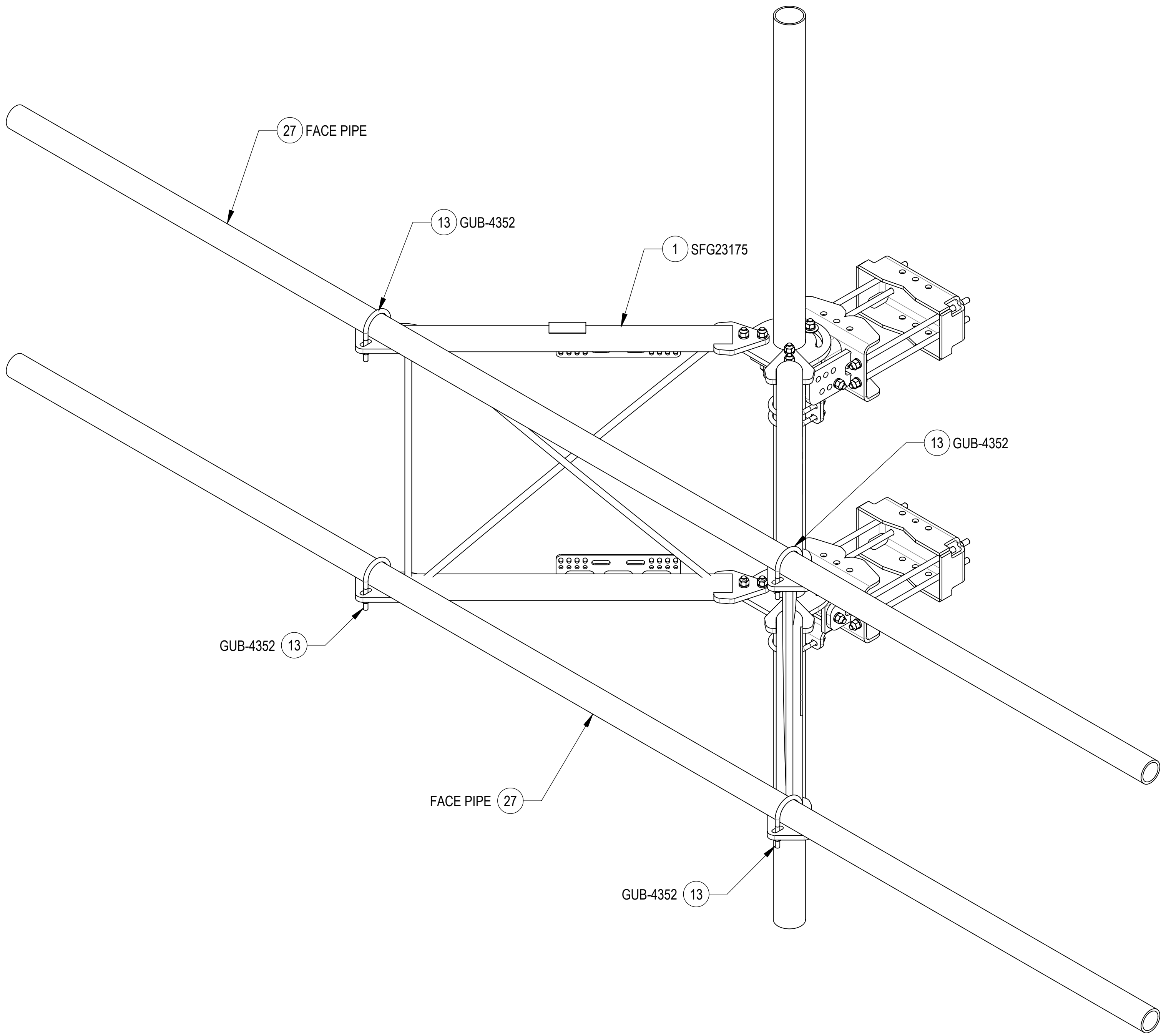
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STEP 4: ATTACH FACE PIPES TO STANDOFF ARMS USING U-BOLTS (GUB-4352).



27 FACE PIPE

13 GUB-4352

1 SFG23175

13 GUB-4352

GUB-4352 13

FACE PIPE 27

GUB-4352 13

TOP

BOTTOM

COMMSCOPE, INC. OF NORTH CAROLINA

TITLE
SFG23RHDX SECTOR FRAME SERIES

SIZE C	SCALE 1:8	DOCUMENT NO. SFG23RHDX		
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	DRAWING			SHEET 10 OF 12
	VERSION 10	STATUS RE	REVISION G	

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C

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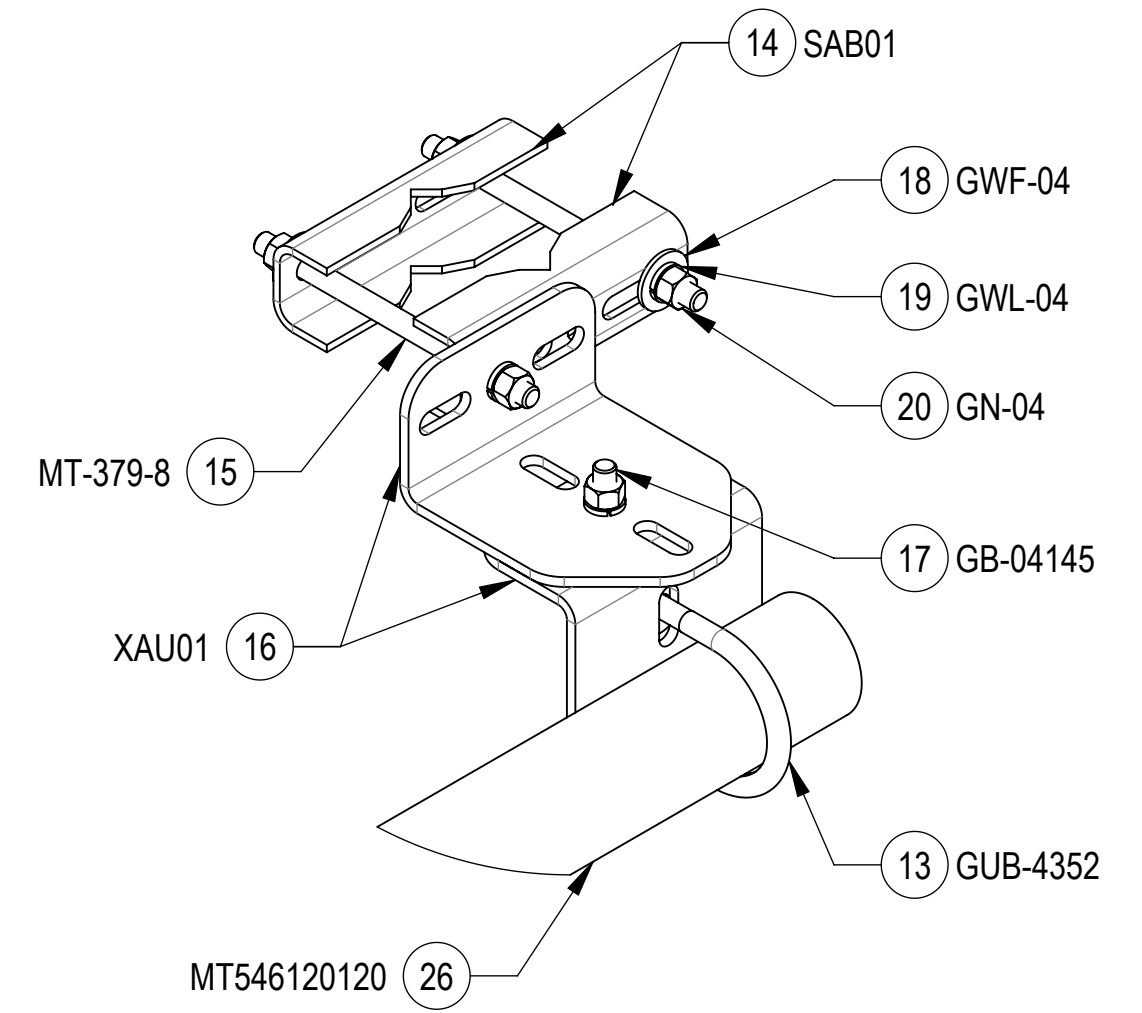
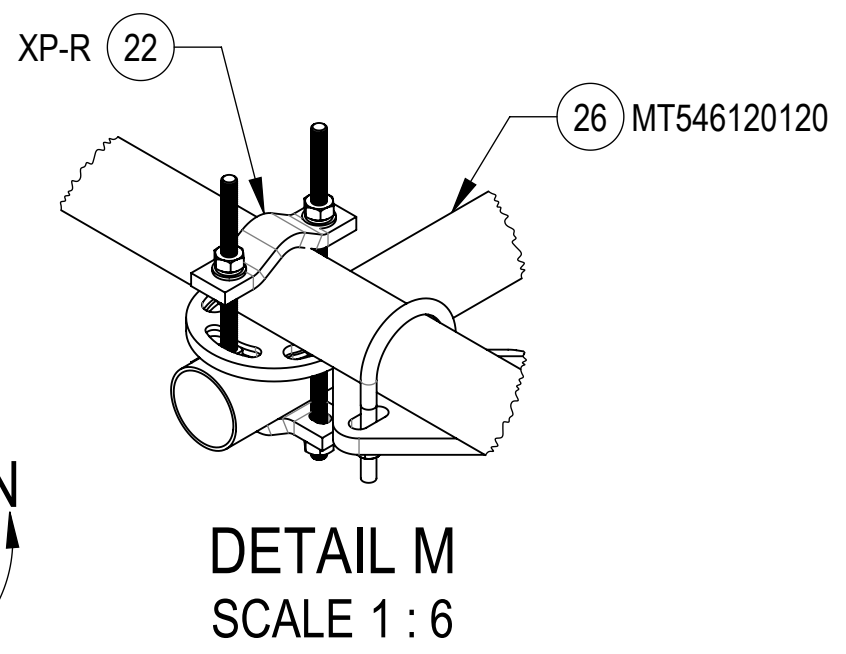
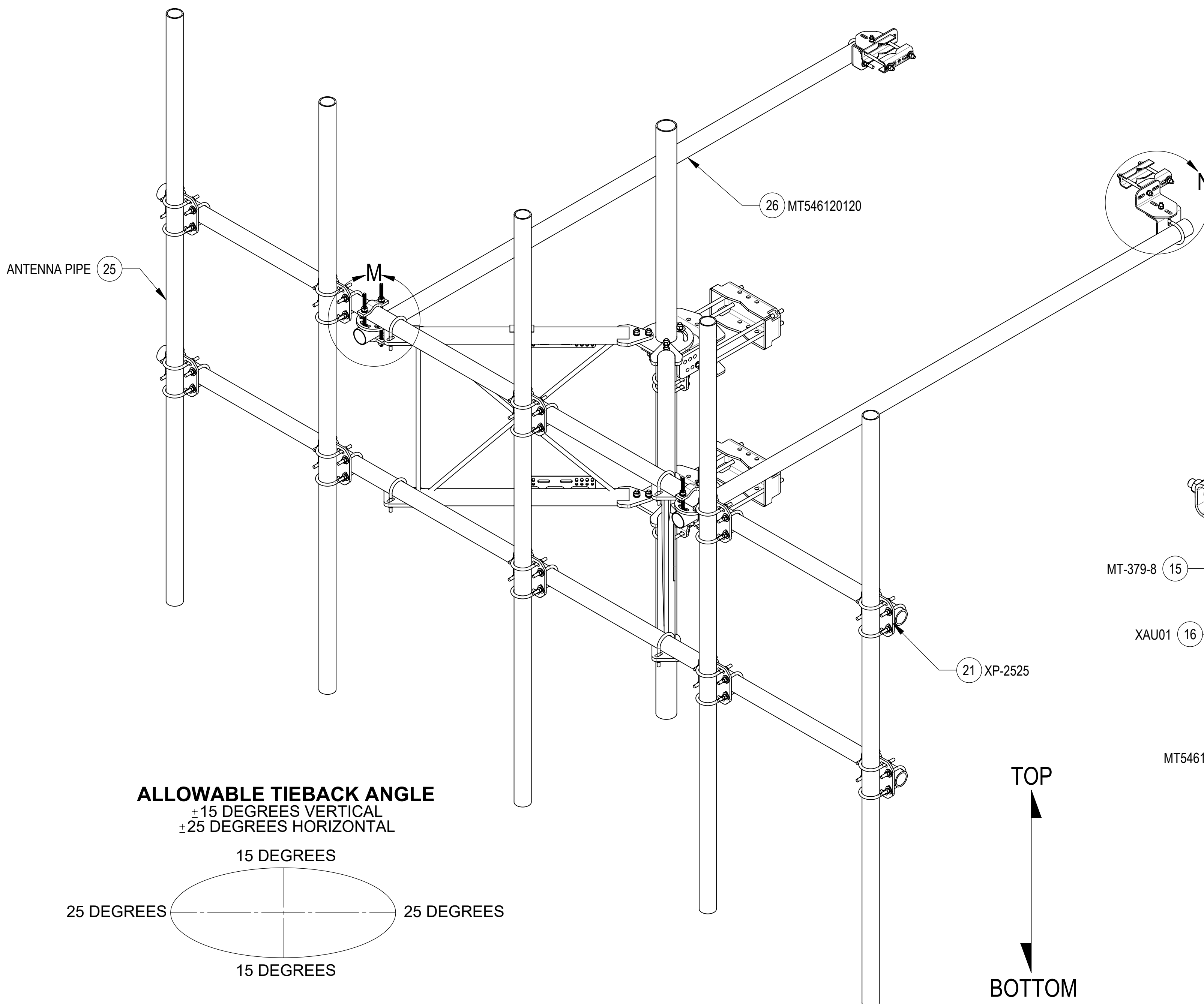
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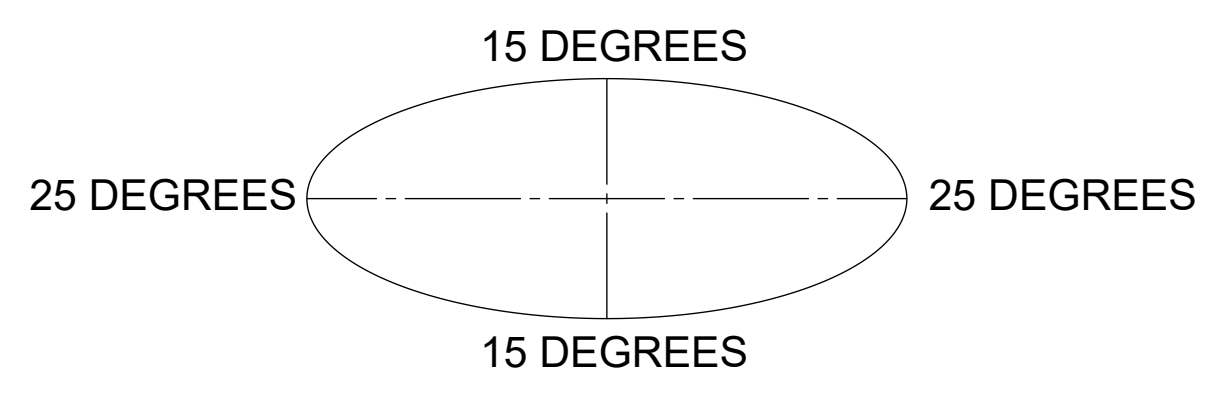
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STEP 5: ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER PLATES KITS (XP-2525) .
 ATTACH TIE BACK PIPES (MT546120120) TO FACE PIPES USING ROUND CROSSOVER PLATES KITS (XP-R).



ALLOWABLE TIEBACK ANGLE
 ±15 DEGREES VERTICAL
 ±25 DEGREES HORIZONTAL



TOP
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 BOTTOM

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG23RHDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:12	DOCUMENT NO. SFG23RHDX		
DRAWING		SHEET		
VERSION 10	STATUS RE	REVISION G	11 OF 12	

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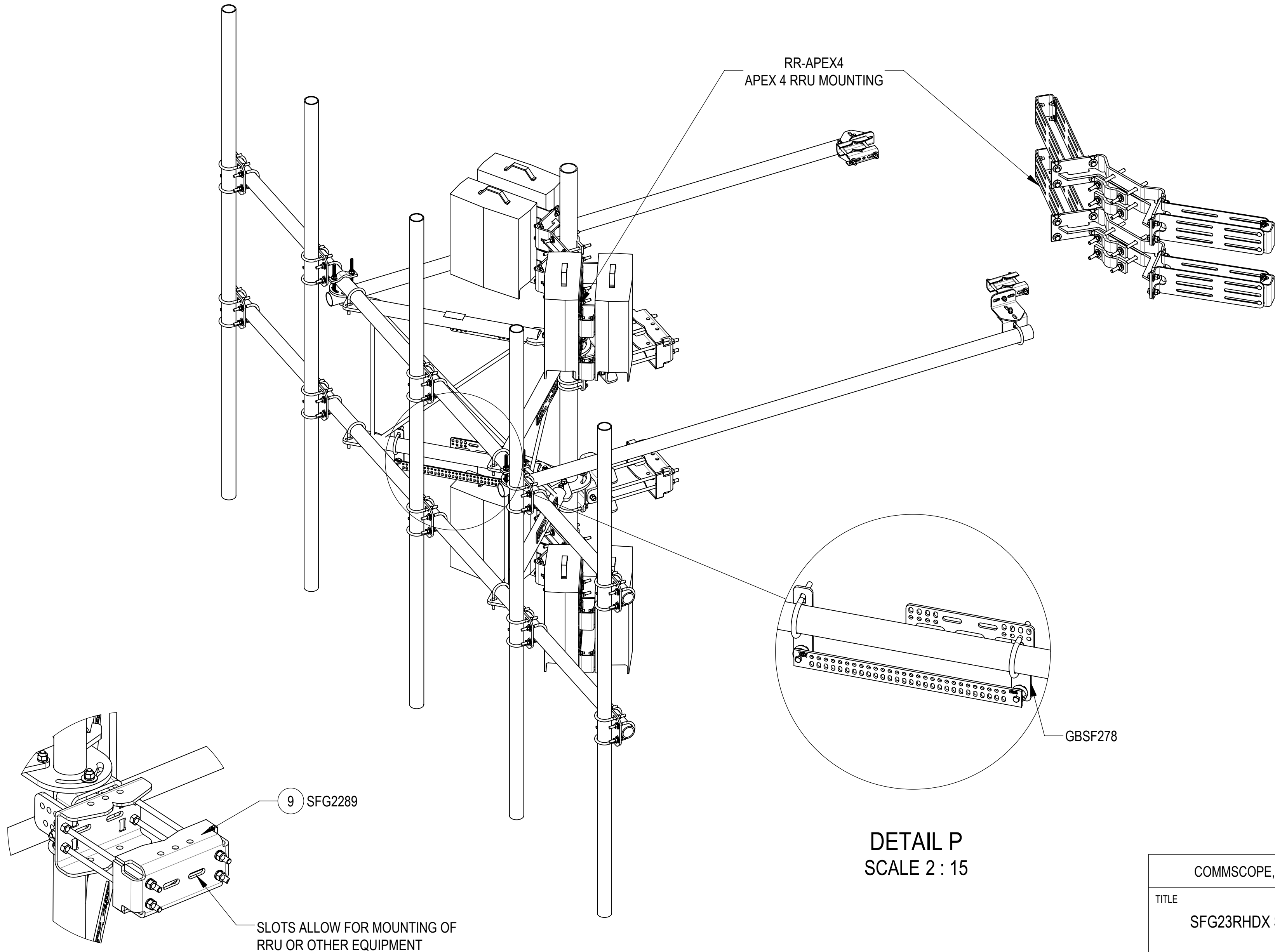
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NOT ALL MATERIALS ARE INCLUDED WITH ITEMS SHOWN ON THIS PAGE
SEE RESPECTIVE PART NUMBER DRAWING BOM FOR DETAILS

ACCESSORIES ORDERED SEPARATELY:



COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG23RHDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:12	DOCUMENT NO. SFG23RHDX		
		DRAWING		SHEET
		VERSION 10	STATUS RE	REVISION G
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