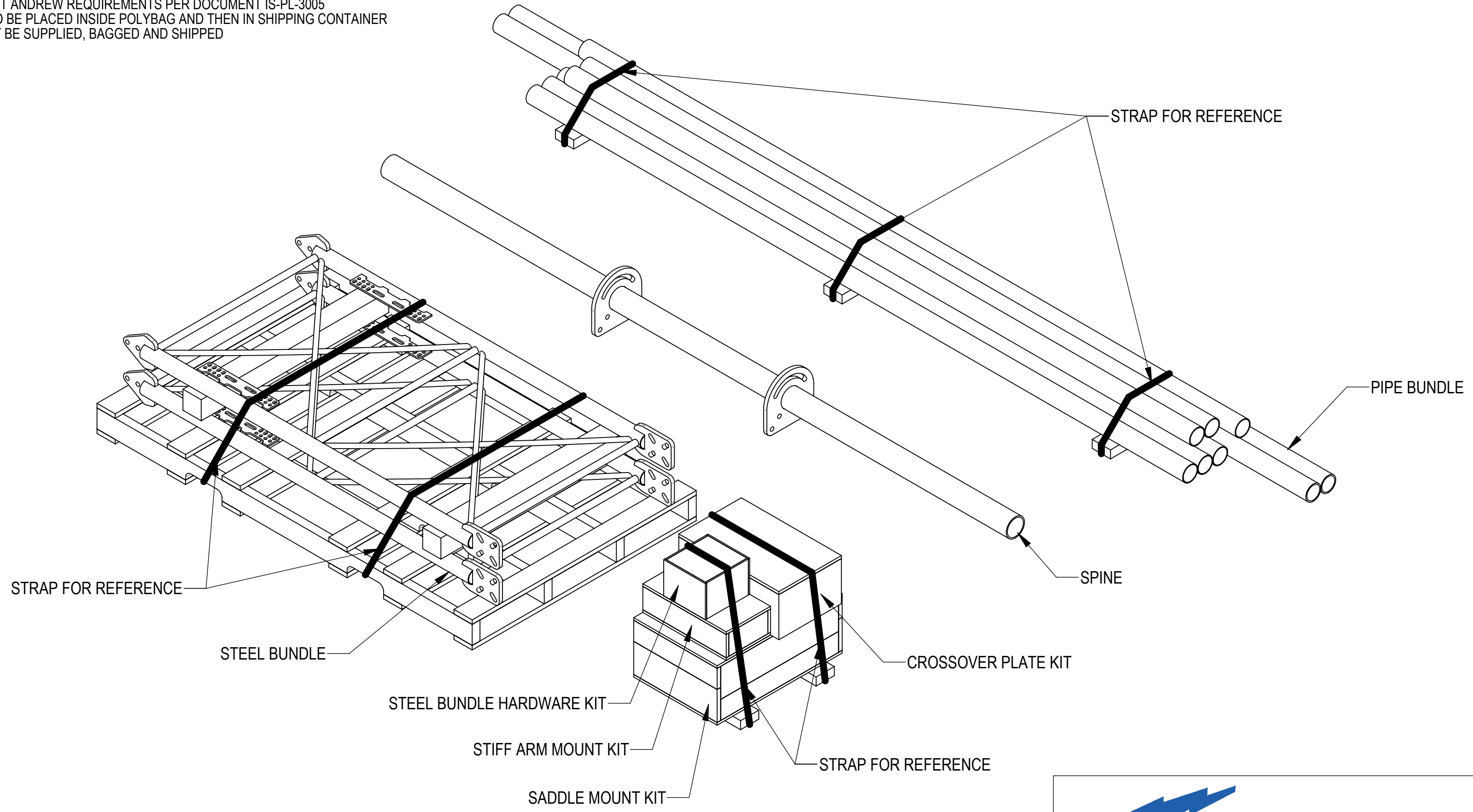



- 1.0 GENERAL NOTES
 - 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
 - 1.2 FOR PATENT INFO: <https://www.adwpat.com>
- 2.0 DESIGN NOTES
 - 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING THE APPURTENANCE. ADDITIONAL PRODUCTS MAY BE 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° 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 ANDREW 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	YMENG 16MAY24	YZ1080 40195671CMO
B	SHEET2: ADDED SFG22RHDXL9-3-96	JL1183 03DEC24	XK1001 40209677CMO
C	SHEET 4&8: ADDED AZIMUTH ADJUSTMENT RANGE VIEW & NOTE	JL1183 10JAN25	BA1025 40212102CMO





ANDREW[®] an Amphenol company

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	
<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET PER ANSI Y 14.5M-1994</small>		NAME	DATE
		CE YMENG	16MAY24
		RW YC1059	06/10/2025
		AD YMENG	06/10/2025
		RE YMENG	06/10/2025
ECN 40212102CMO		SFG22RHDXL SERIES	
SCALE 1:24		DOCUMENT NO. SFG22RHDXL	
SIZE	Auth Group	INSL	MODEL
C			VERSION STATUS REVISION
			VERSION STATUS REVISION
			VERSION STATUS REVISION

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

Confidential

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	SFG23RDX-HK01	SFG22HDXL-SB01	XP-2525-2	XP-2525-6	XP-2525-8	XP-2525-OFF-4	PB0310B02TEB0211K	PB02TEB0308B0211K	PB0410B02TEB0212K	PB02TEB0408B0212K	PB02TEB0212K	PB0410B02TEB0213K	PB02TEB0408B0213K	PB02TEB0213K	PB02TEB0308B0209K	SFG2204	SFG2299		
SFG22RHDXL11-3-126	PG,SF,11'FP,(3)126"AP	878.72							3	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1
SFG22RHDXL11-3-96	PG,SF,11'FP,(3)096"AP	852.14	11.32	9.06	24.46	16.71	14.51	37.47	3	1	1	1	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1
SFG22RHDXL12-4-126	SF,12'FP,(4)126"AP	952.74							4	1	1	1	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1
SFG22RHDXL12-4-96	SF,12'FP,(4)096"AP	917.31	12.12	9.06	25.42	17.78	14.51	38.75	4	1	1	1	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1
SFG22RHDXL12-B	SF,12'FP,NOAP	736.95							-	1	1	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1
SFG22RHDXL13-4-126	PG,SF,13'FP,(4)126"AP	958.56							4	1	1	1	1	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	1
SFG22RHDXL13-4-96	PG,SF,13'FP,(4)096"AP	923.12	12.39	9.06	25.74	18.13	14.51	39.17	4	1	1	1	1	-	-	1	-	-	-	-	-	-	-	1	-	-	-	1	1	
SFG22RHDXL13-B	SF,13'FP,NOAP	742.76							-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	
SFG22RHDXL9-3-96	PG,SF,09'FP,(3)096"AP	780.42	10.25	9.06	23.18	15.30	14.51	35.77	3	1	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" X126"	2.72	2.72	2.42	3.67	3.67	3.26

- NOTES:
 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: SFG22RHDXL11-3-96 HAS A FRONT EPA OF 11.32 FT² WITH NO ICE PLUS 3 ANTENNA PIPES WITH A FRONT EPA OF 3X2.07=6.21 FT² WITH NO ICE. SO, THE TOTAL FRONT EPA SHOULD BE 17.53 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 24.46 FT² WITH NO ICE PLUS 4 ANTENNA PIPES WITH A 3-SECTOR EPA OF (3X1.84)X3=16.56 FT² WITH NO ICE. SO, THE TOTAL 3-SECTOR EPA SHOULD BE 41.02 FT².

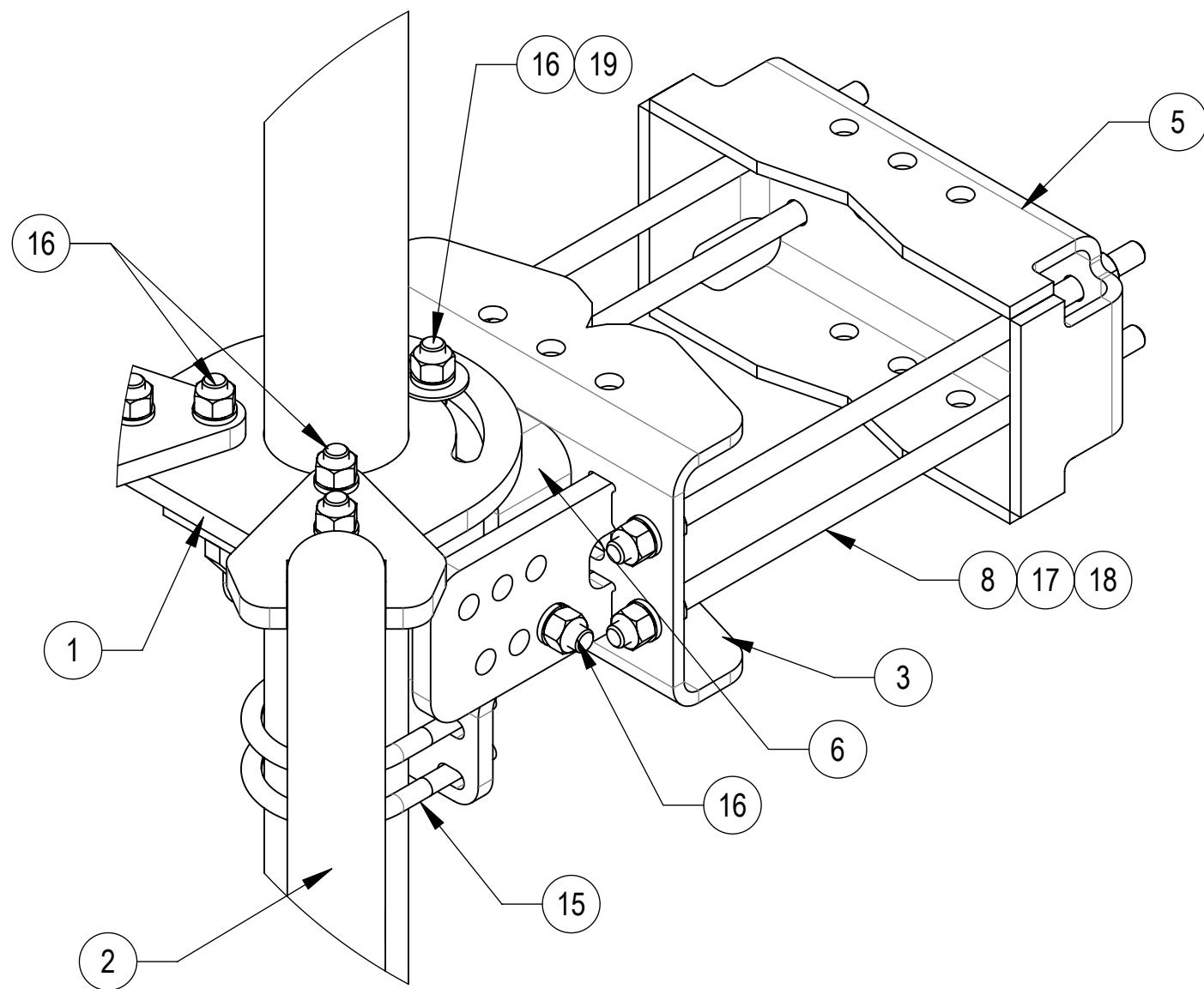
ANDREW an Amphenol company

TITLE: SFG22RHDXL SERIES

SIZE: C SCALE: 1:16 DOCUMENT NO.: SFG22RHDXL

DRAWING			SHEET 2 OF 12
VERSION	STATUS	REVISION	
02	RE	C	

Confidential

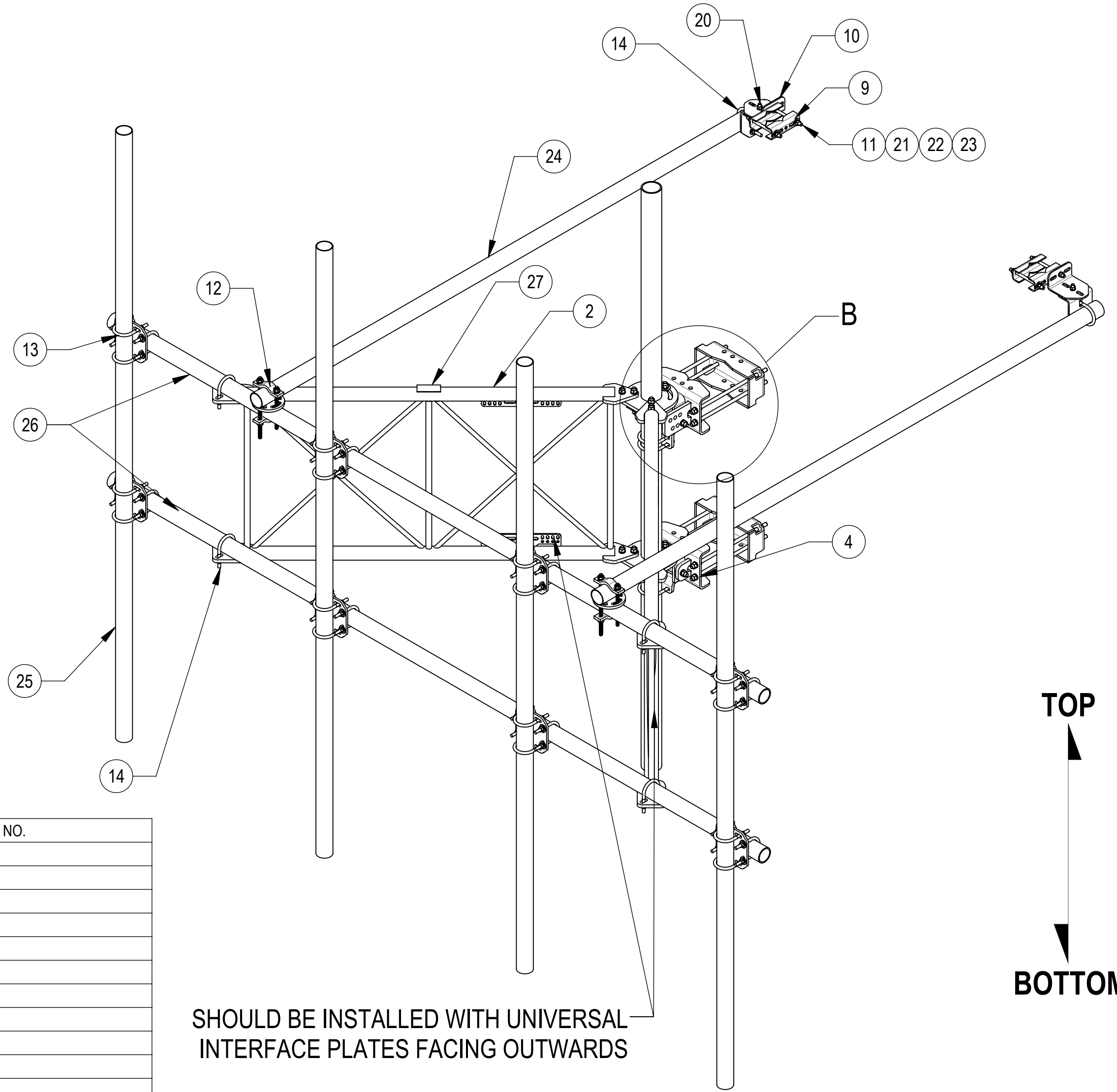


DETAIL B
SCALE 1 : 4

SFG22RHDXL13-4-126 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE)

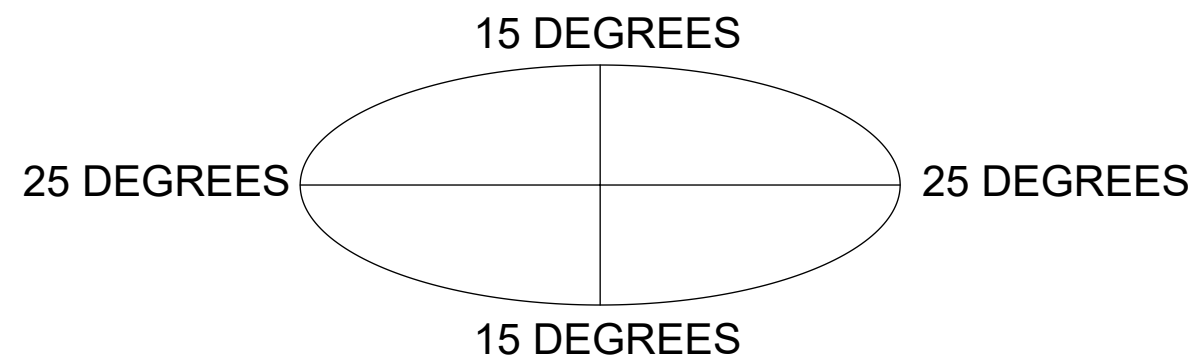
COMPONENT PART NUMBERS PROVIDED FOR ASSEMBLY PURPOSES;
INDIVIDUAL COMPONENTS MAY BE SHIPPED AS PARTS WITHIN AN INCLUDED KIT.

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	SFG2204	WELDMENT, BACK VERTICAL ARM MOUNT	1	97.29 LBS	
2	SFG2298-00	ARM, STANDOFF, G22HDXL	2	89.48 LBS	
3	SFG2380	WELDMENT, HD, TOP TAPER BRACKET	1	22.78 LBS	
4	SFG2381	WELDMENT, HD, LOWER TOWER LEG BRACKET	1	17.42 LBS	
5	SFG2289	G2 RRU BACK CLAMP, HD	2	18.65 LBS	
6	SFG2386	WELDMENT, SFG2 AZIMUTH BRACKET	1	10.07 LBS	
7	SFG2397-00	WELDMENT, G23 AZIMUTH BRACKET	1	7.94 LBS	
8	MT-382-18	5/8" X 18" THREADED ROD	8	1.43 LBS	
9	SAB01	FORMED CLAMP	4	1.35 LBS	
10	XAU01	ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD	4	2.98 LBS	
11	MT-379-8	1/2" X 8" GALV THREADED ROD	4	0.45 LBS	
12	XP-R	CROSSOVER PLATE, ROUND, UP TO 3.5" OD	2	6.20 LBS	
13	XP-2525	CROSSOVER PLATE KIT, 2-7/8 OD X 2-7/8 OD	8	8.37 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
14	GUB-4352	1/2" X 3" X 5-1/4" GALV U-BOLT	6	0.71 LBS	
15	GUB-4355	1/2" X 3-5/8" X 5" GALV U-BOLT	3	0.71 LBS	
16	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	14	0.28 LBS	
17	GN-05	5/8" GALV HEX NUT	24	0.08 LBS	
18	GWL-05	5/8" GALV LOCK WASHER	16	0.03 LBS	
19	GWF-05	5/8" GALV FLAT WASHER, 1.7OD	2	0.06 LBS	
20	GB-04145	1/2" X 1-1/2" GALV BOLT KIT	2	0.13 LBS	
21	GN-04	1/2" GALV HEX NUT	10	0.04 LBS	
22	GWL-04	1/2" GALV LOCK WASHER	10	0.01 LBS	
23	GWF-04	1/2" GALV FLAT WASHER	8	0.04 LBS	
24	MT546120120	PIPE, 2.875"OD X 120"	2	35.44 LBS	
25	MT546126120	PIPE, 2.875"OD X 126"	4	37.21 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
26	MT546156	2.875" O.D. X 156" PIPE	2	75.58 LBS	PART NO. SEE INDIVIDUAL DRAWING
27	SFG2299	LABEL, SFG22RHDXL	1	0.03 LBS	



SHOULD BE INSTALLED WITH UNIVERSAL
INTERFACE PLATES FACING OUTWARDS

ALLOWABLE TIEBACK ANGLE
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



TOP
↑
BOTTOM
↓



TITLE				
SFG22RHDXL SERIES				
SIZE	SCALE	DOCUMENT NO.		
C	1:16	SFG22RHDXL		
DRAWING				SHEET
VERSION	STATUS	REVISION	3 OF 12	
02	RE	C		

Confidential

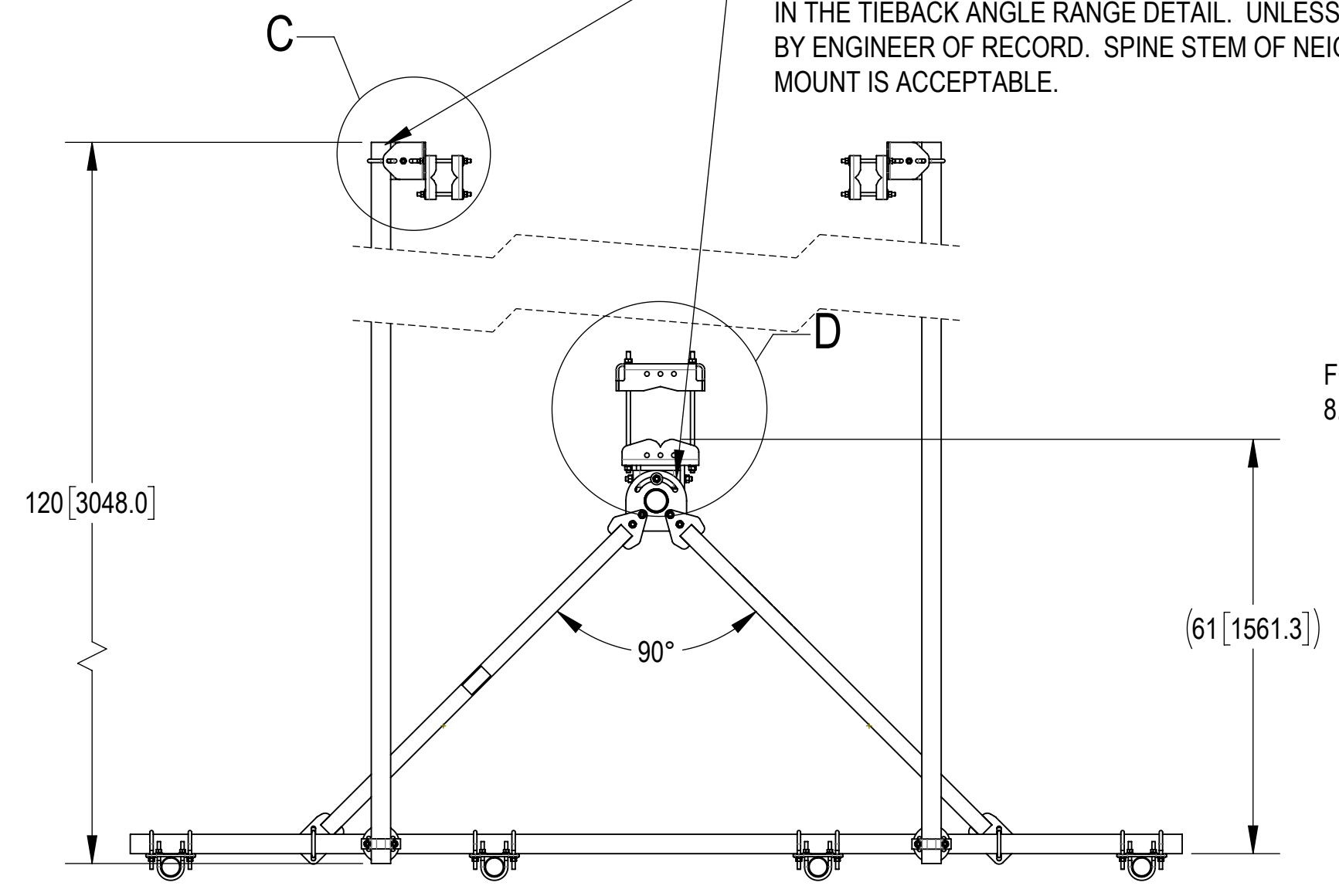
4

3

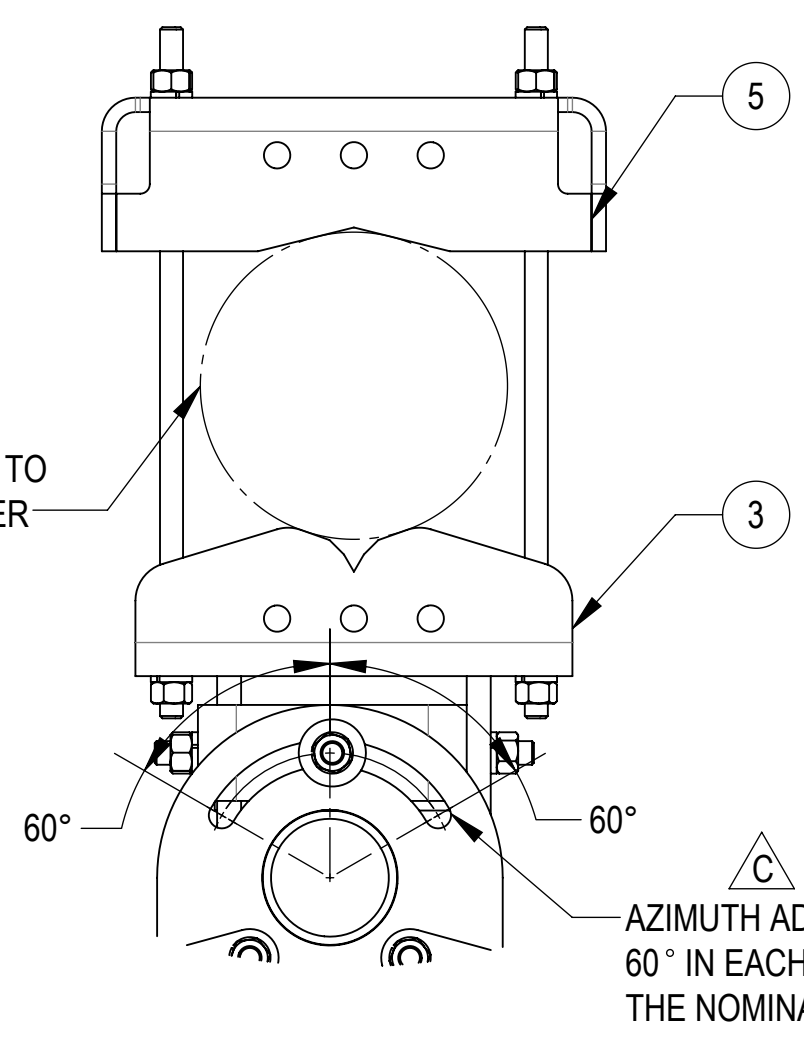
2

1

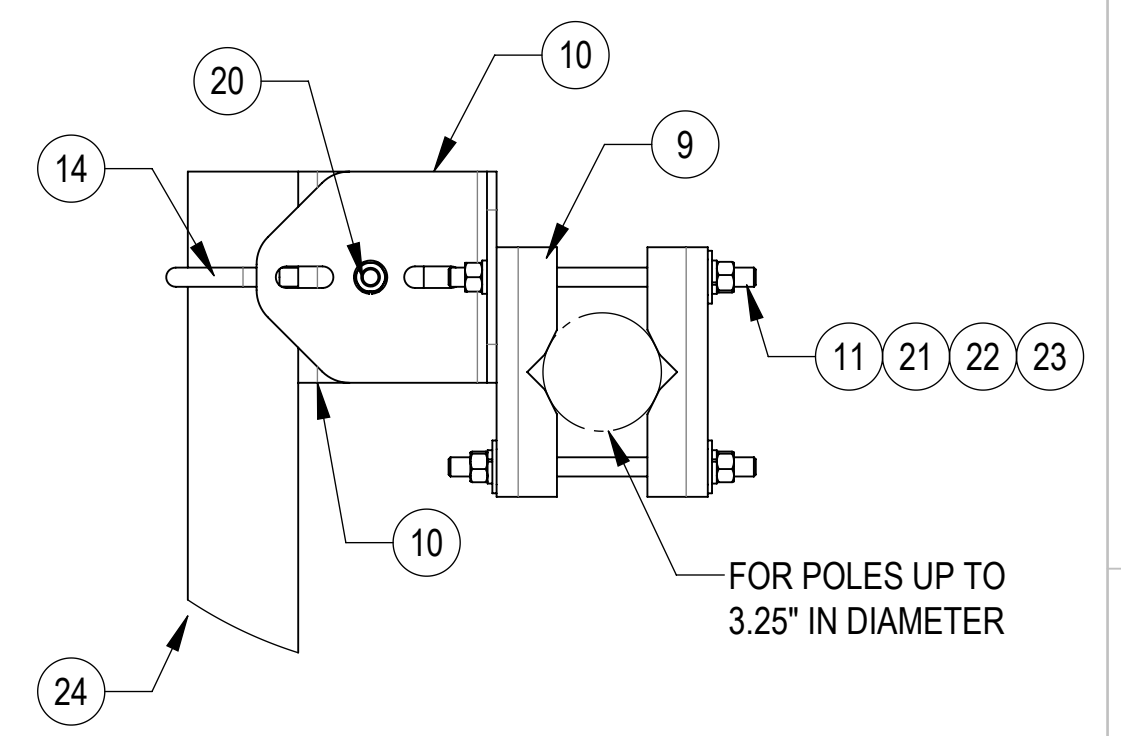
TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED IN THE TIEBACK ANGLE RANGE DETAIL. UNLESS APPROVED BY ENGINEER OF RECORD. SPINE STEM OF NEIGHBORING MOUNT IS ACCEPTABLE.



FOR POLES UP TO 8.0" IN DIAMETER

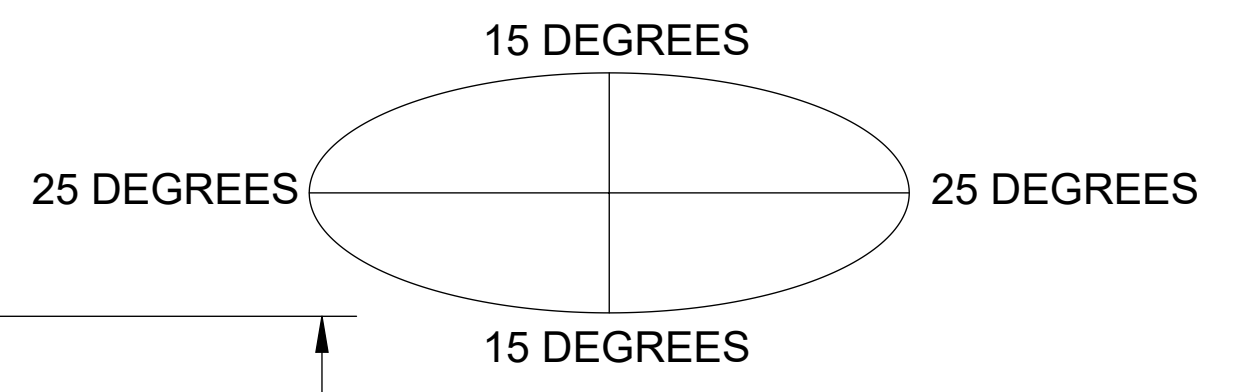


DETAIL D
SCALE 1 : 5

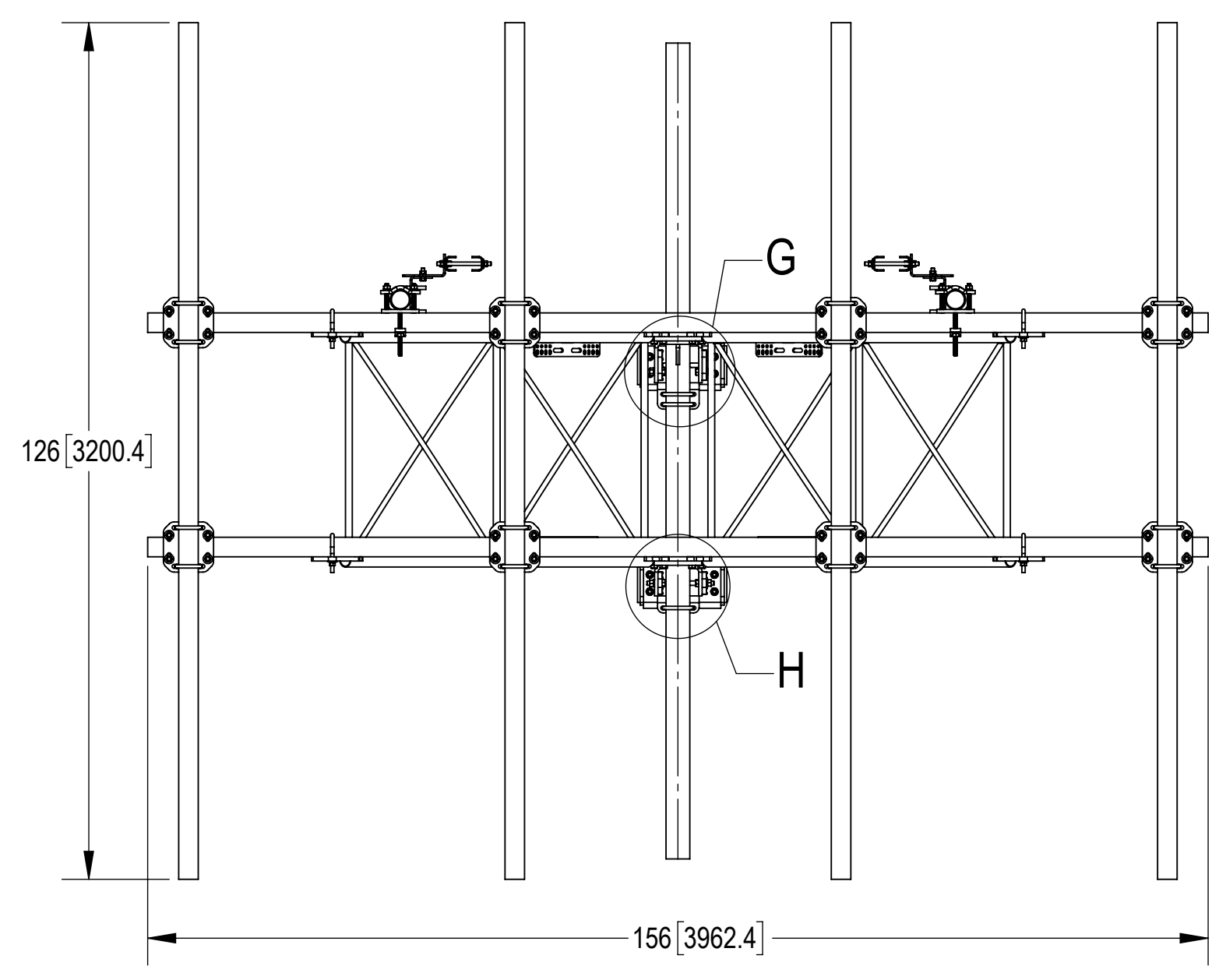


DETAIL C
SCALE 1 : 5

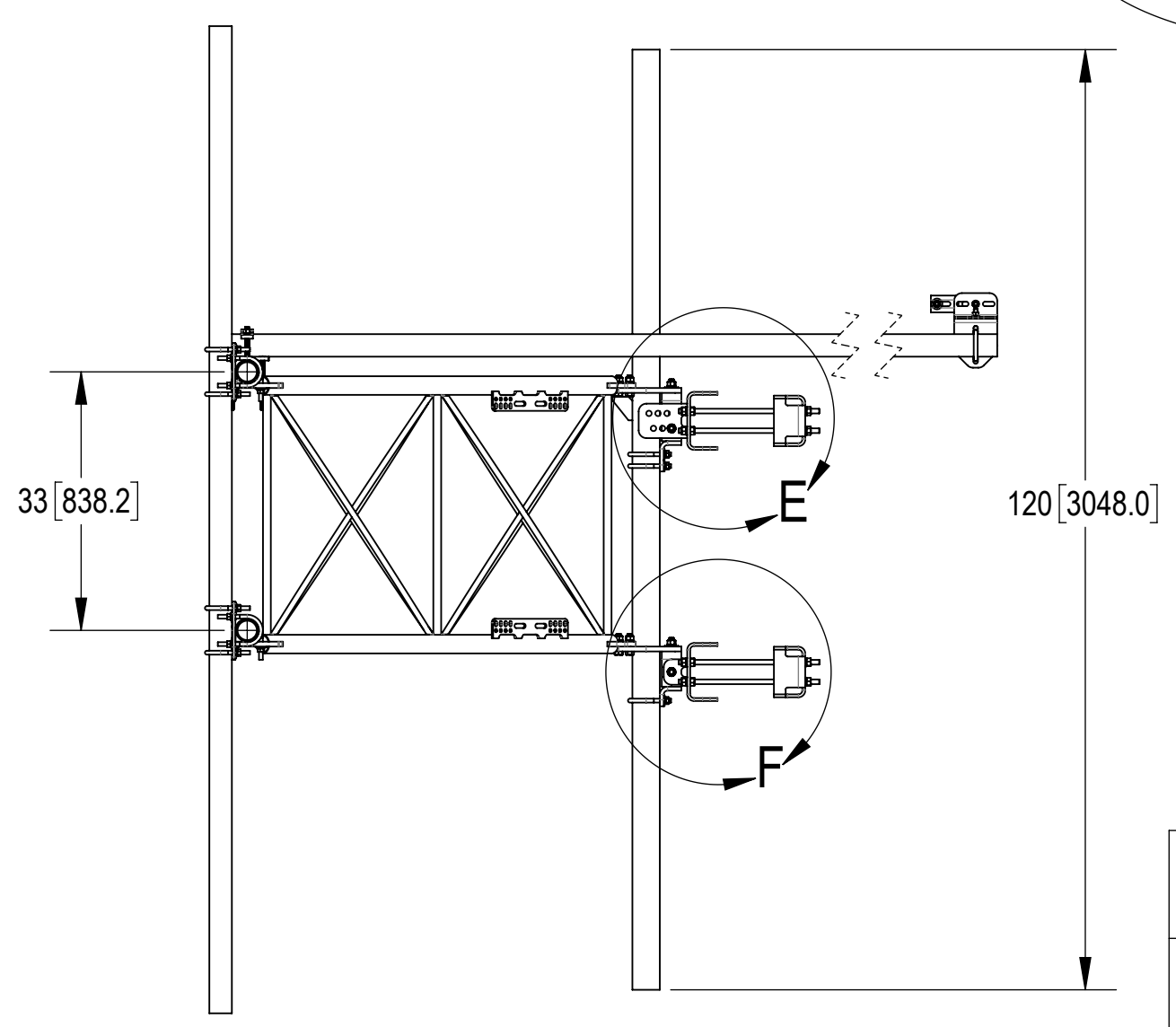
ALLOWABLE TIEBACK ANGLE
±15 DEGREES VERTICAL
±25 DEGREES HORIZONTAL




SFG22RHDXL13-4-126 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE ON SHEET 3)



TOP
BOTTOM



 ANDREW an Amphenol company				
TITLE SFG22RHDXL SERIES				
SIZE C	SCALE 1:22	DOCUMENT NO. SFG22RHDXL		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
		02	RE	C
				4 OF 12

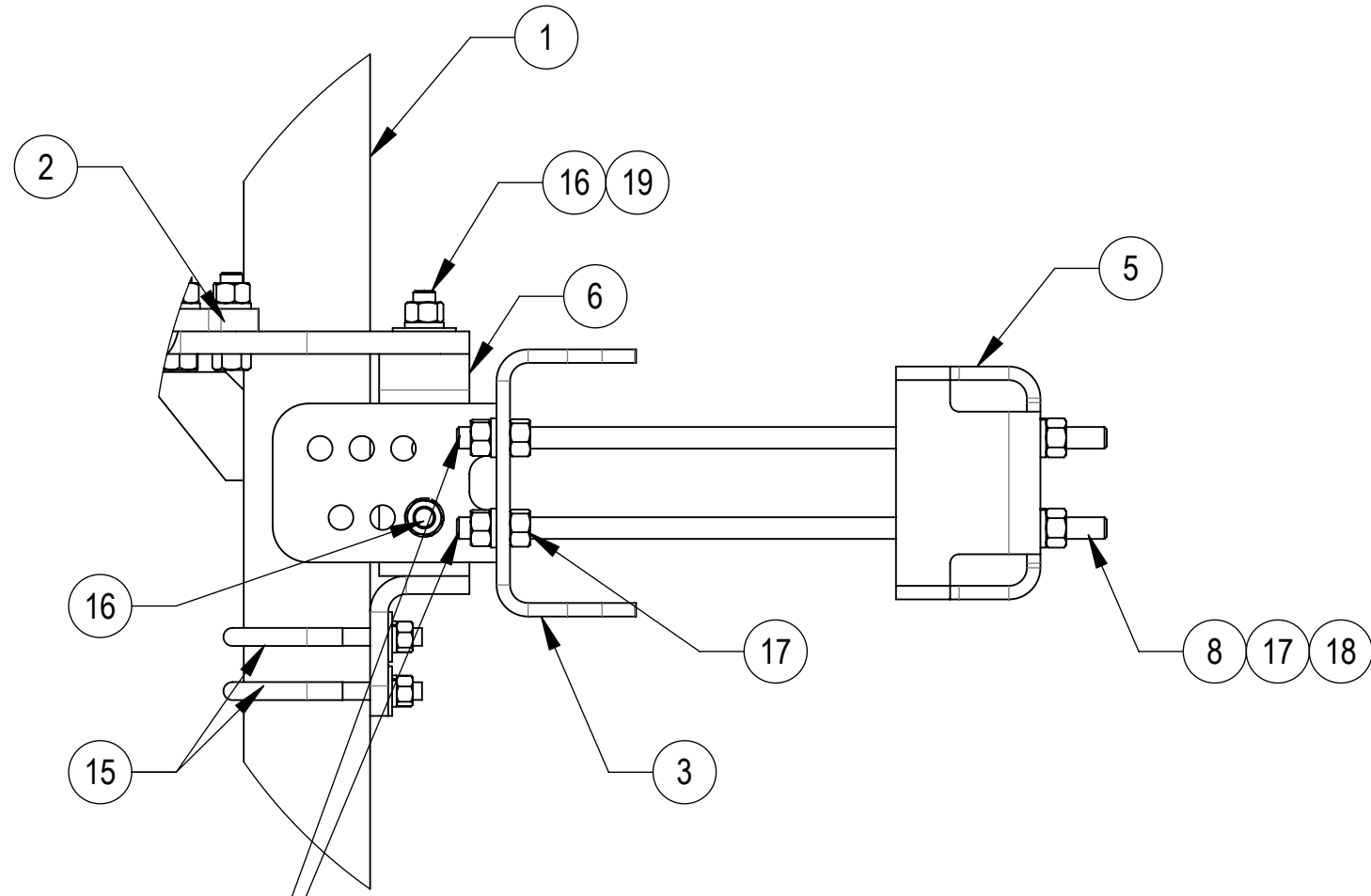
Confidential

4

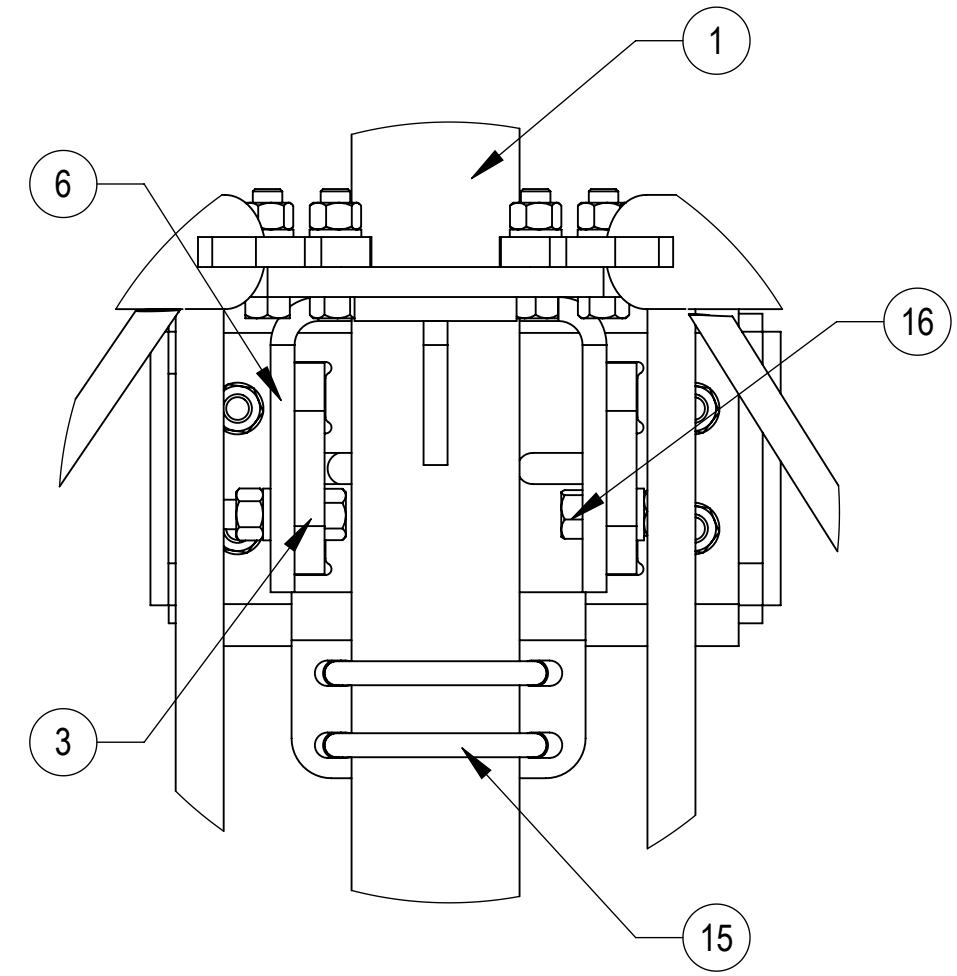
3

2

1

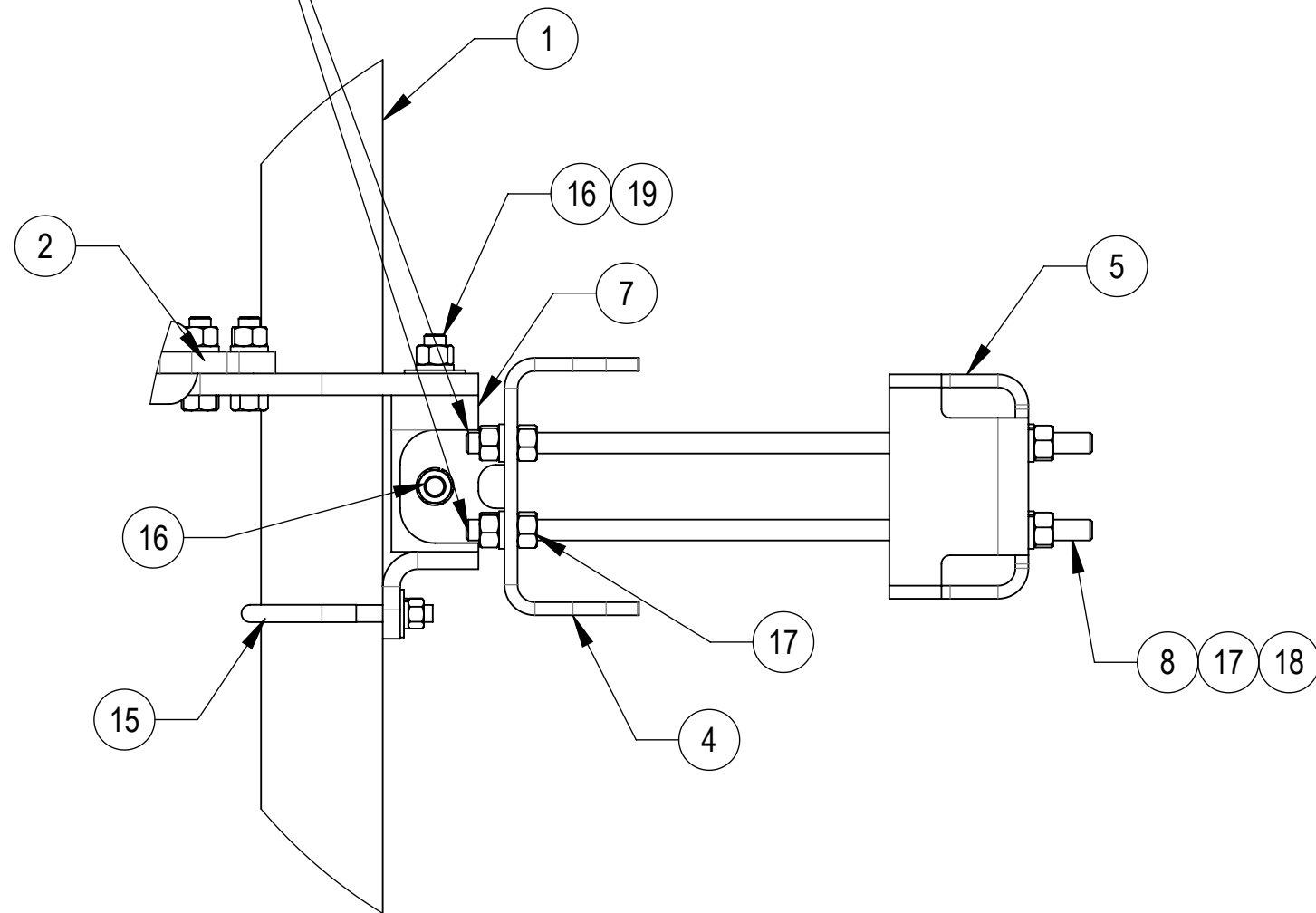


DETAIL E
SCALE 1 : 5

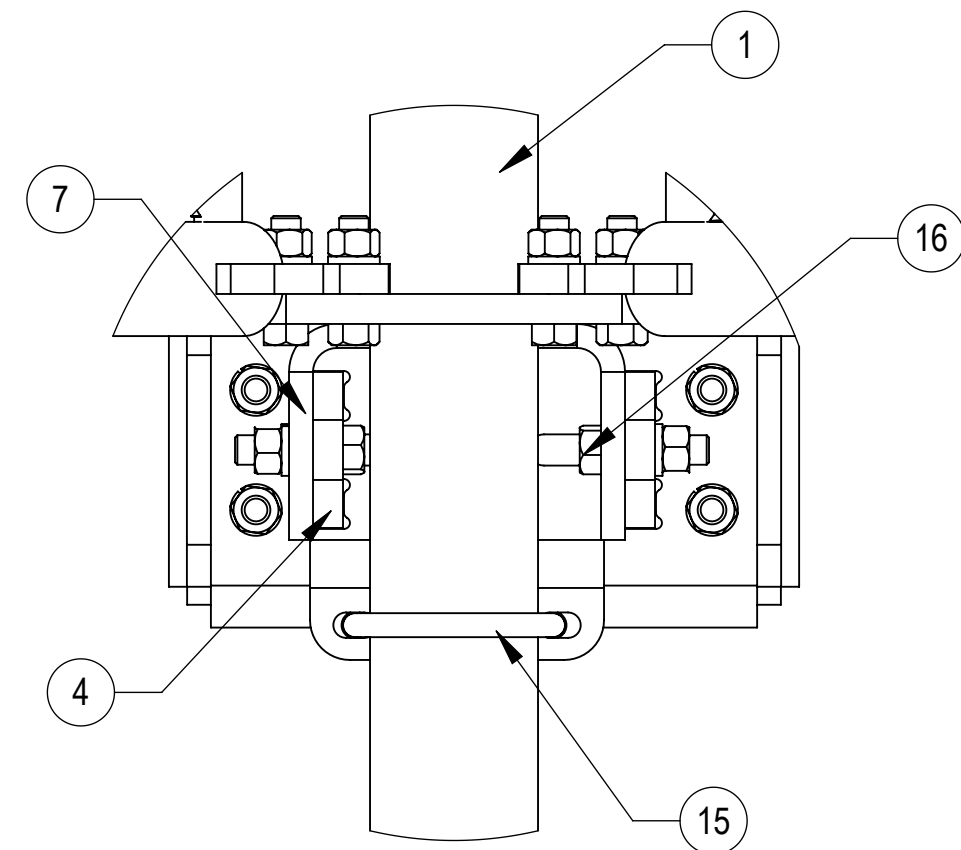


DETAIL G
SCALE 1 : 4

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



DETAIL F
SCALE 1 : 5

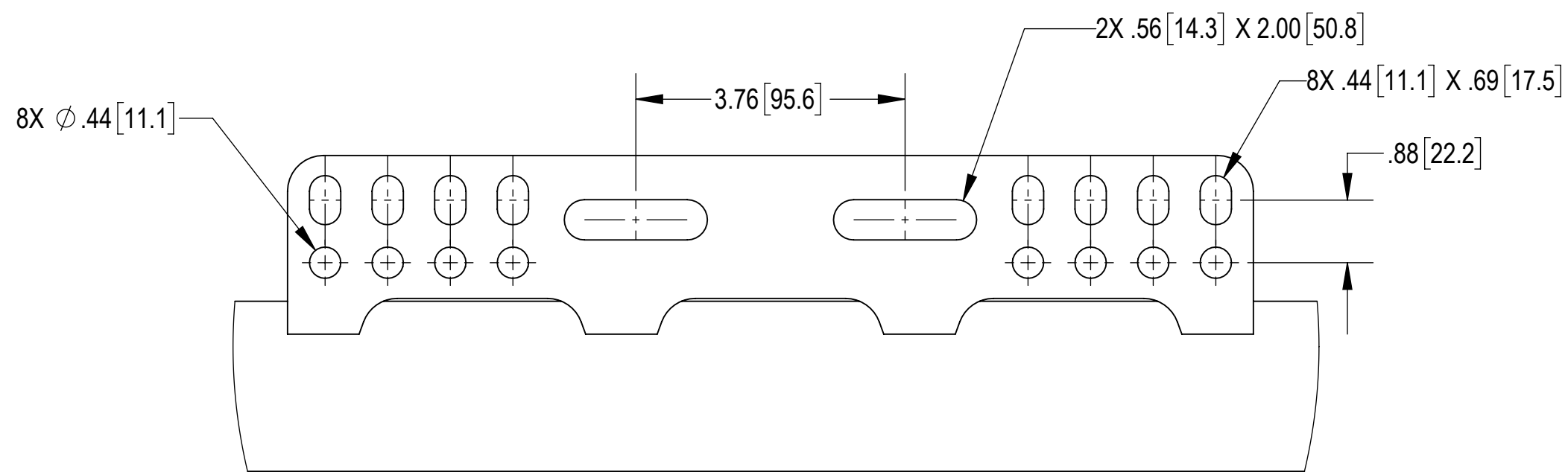
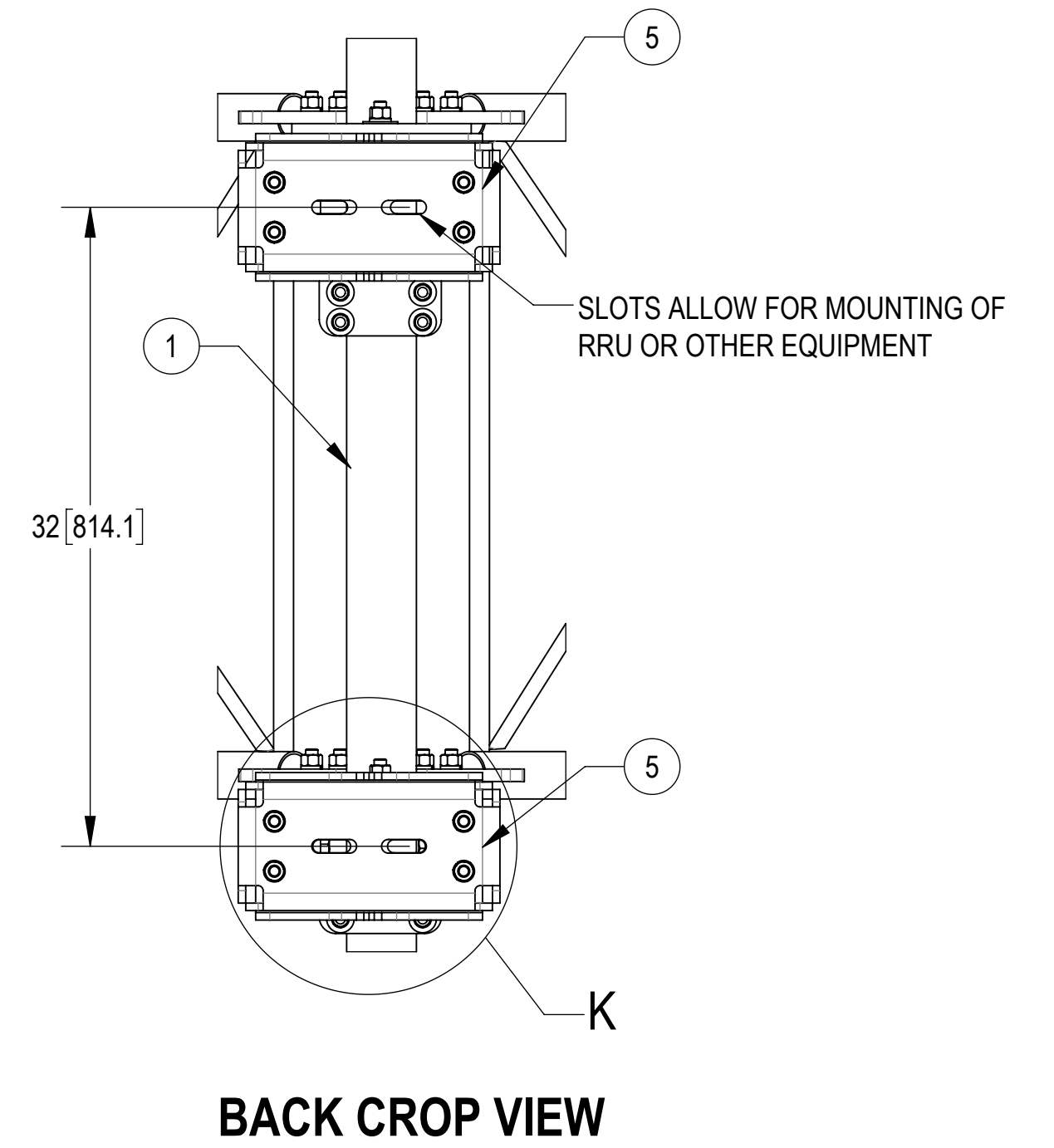
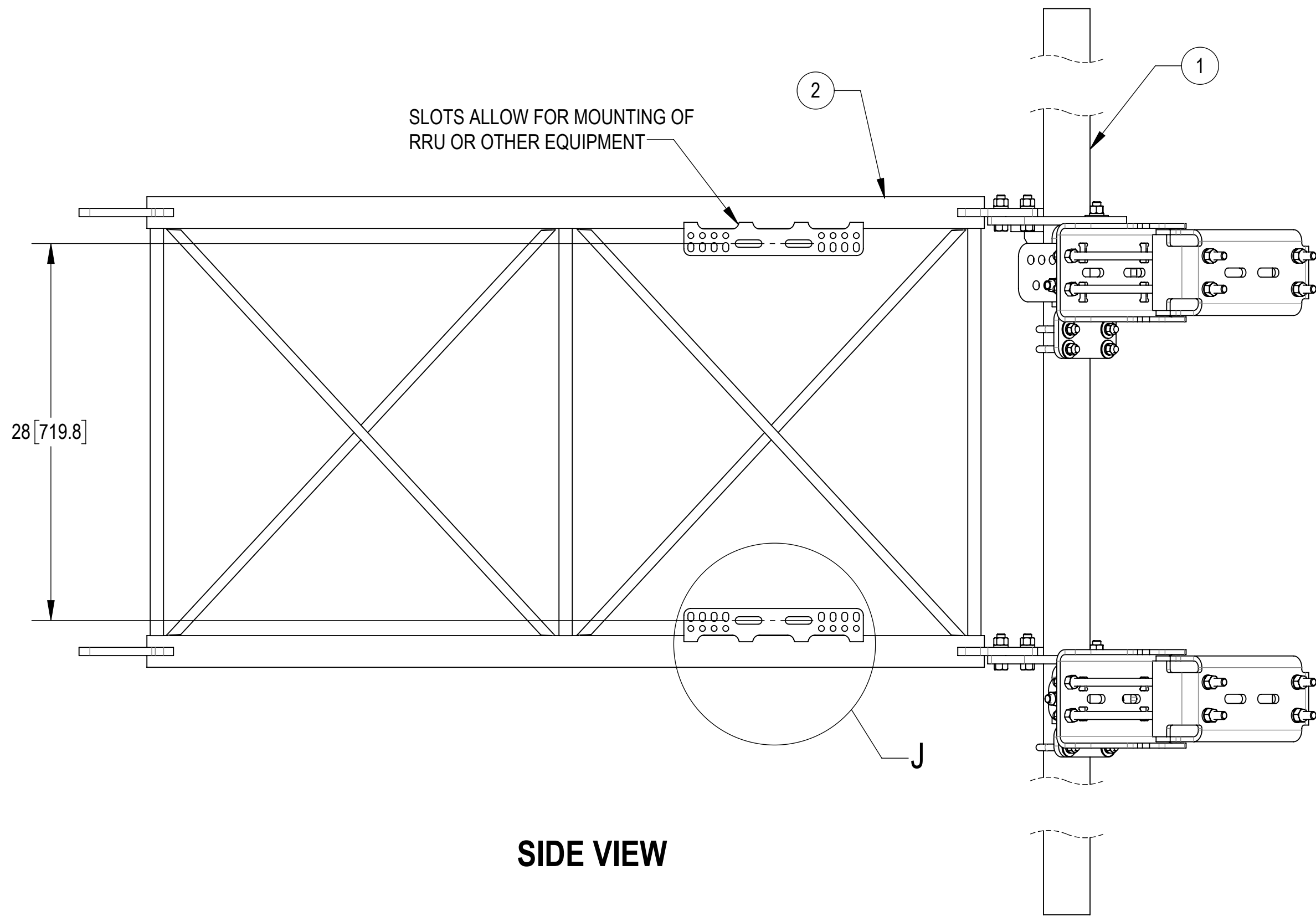


DETAIL H
SCALE 1 : 4

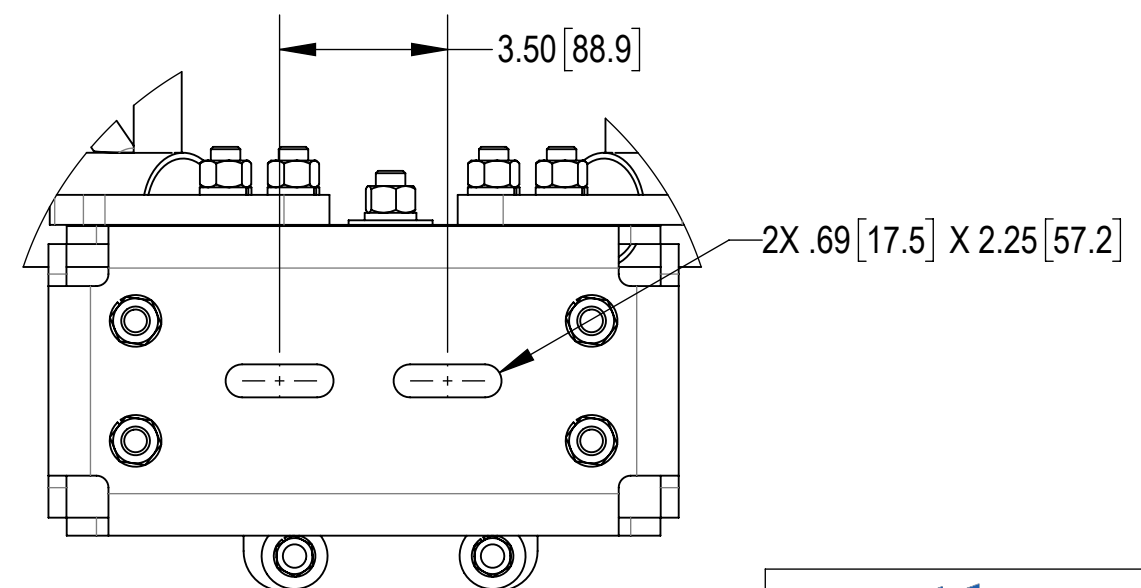


TITLE					SFG22RHDXL SERIES	
SIZE	SCALE	DOCUMENT NO.				
C	1:22	SFG22RHDXL				
		DRAWING			SHEET	
		VERSION	STATUS	REVISION	5 OF 12	
		02	RE	C		



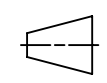
Confidential



DETAIL J
SCALE 1 : 2



DETAIL K
SCALE 1 : 4

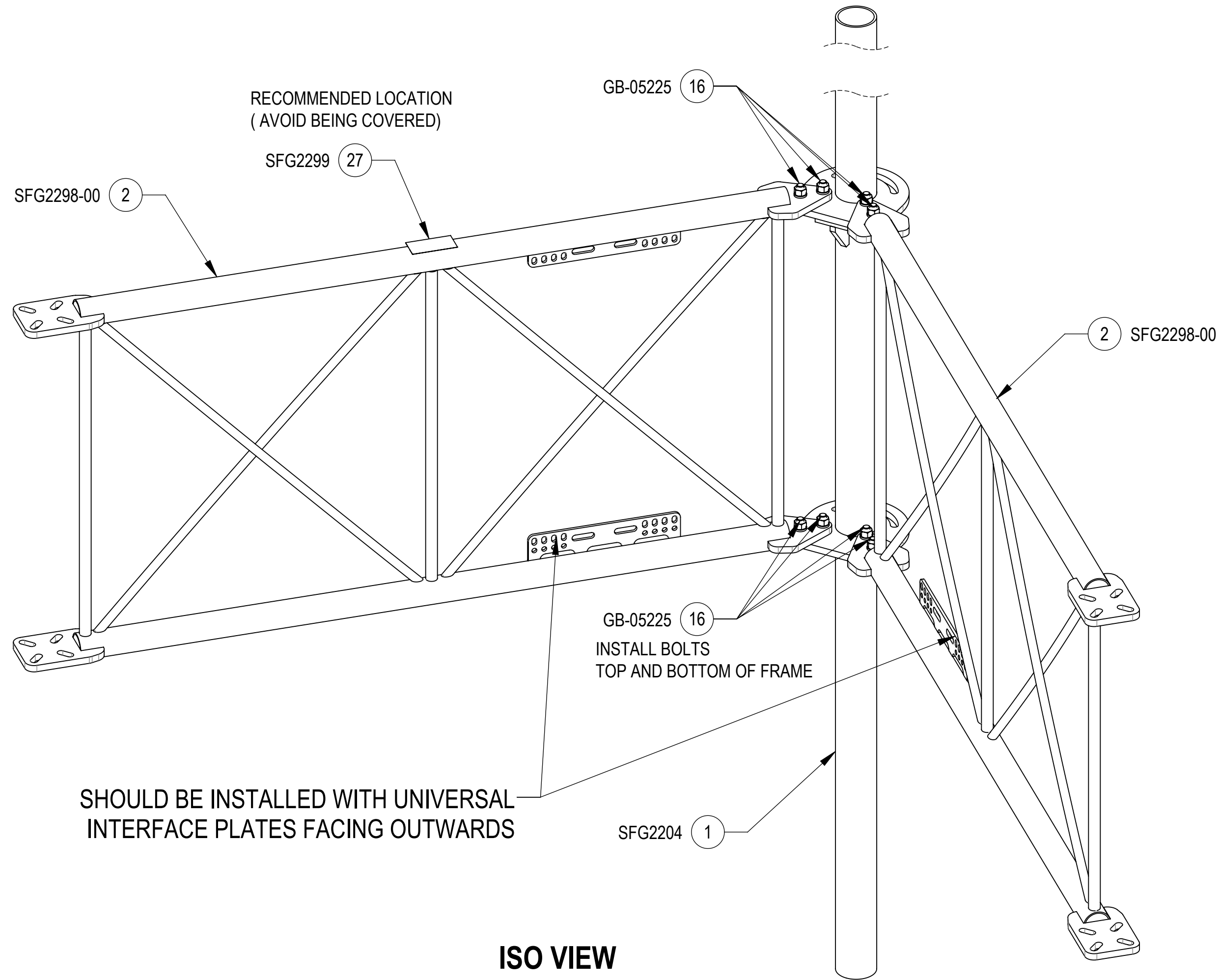
 ANDREW an Amphenol company				
TITLE SFG22RHDXL SERIES				
SIZE C	SCALE 1:32	DOCUMENT NO. SFG22RHDXL		
 		DRAWING		SHEET 6 OF 12
		VERSION 02	STATUS RE	

Confidential

INSTALLATION SEQUENCE - REFERENCE ONLY

STEP 1: ATTACH STANDOFF ARMS (SFG2298-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KITS (GB-05225)

ATTACH LABEL (SFG2299) ON TOP OF STANDOFF ARMS(SFG2298-00) . (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER BEFORE APPLYING LABEL.)



TITLE				
SFG22RHDXL SERIES				
SIZE	SCALE	DOCUMENT NO.		
C	1:32	SFG22RHDXL		
	DRAWING			SHEET
	VERSION	STATUS	REVISION	
	02	RE	C	

Confidential

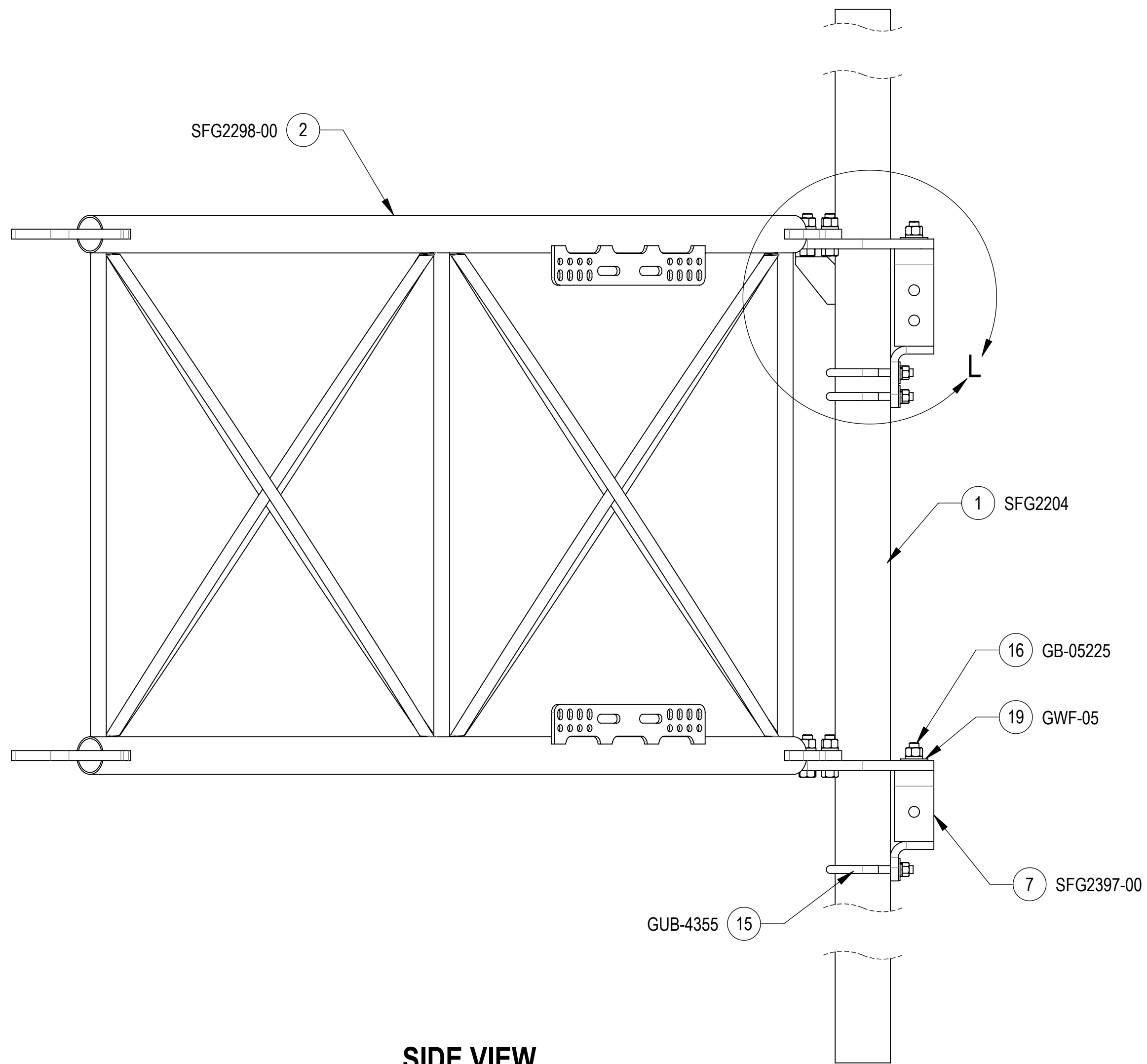
4

3

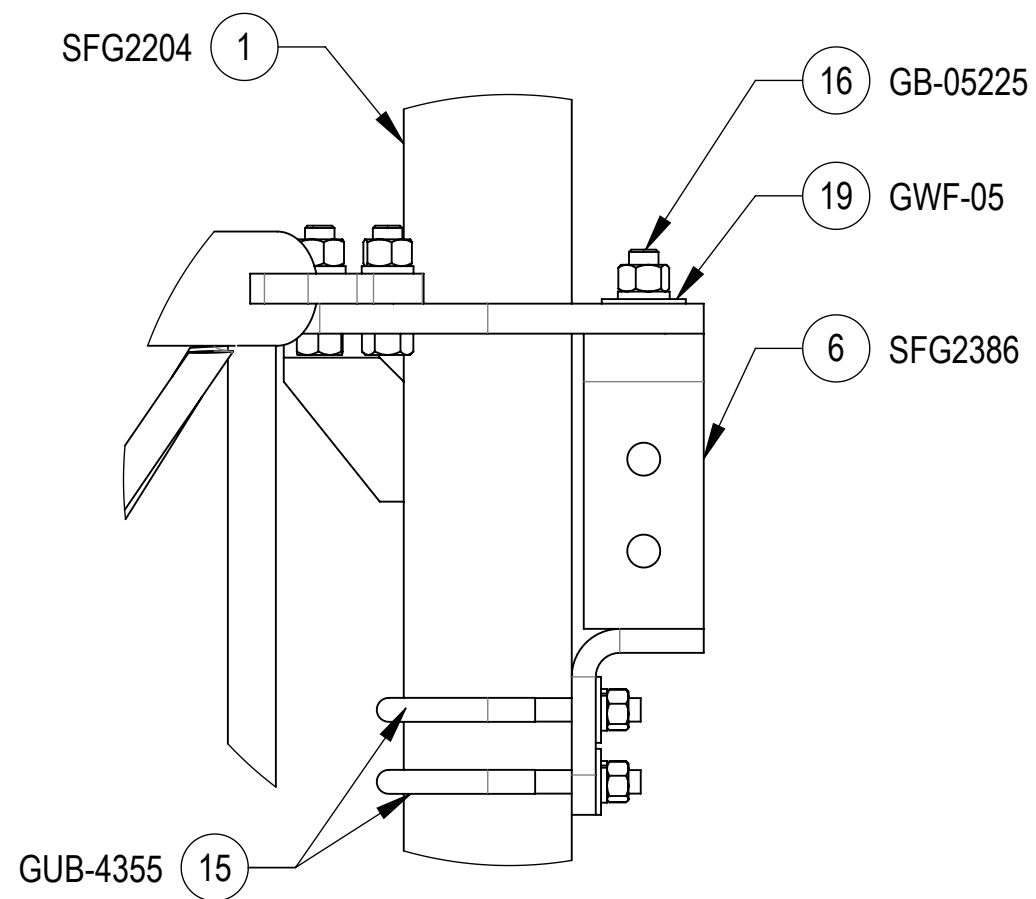
2

1

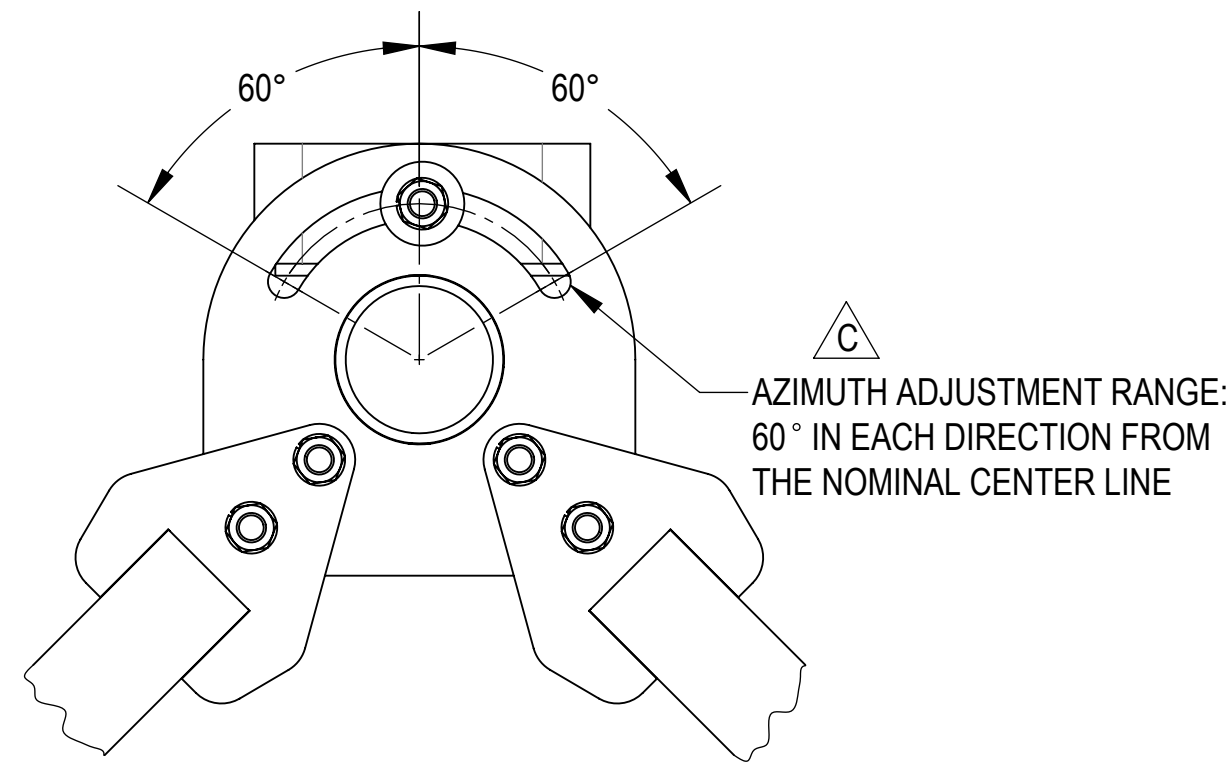
**STEP 2: AT TOP, ATTACH AZIMUTH/TAPER BRACKET (SFG2386) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225),
 FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355);
 AT BOTTOM, ATTACH AZIMUTH/TAPER BRACKET (SFG2397-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225),
 FLAT WASHER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



SIDE VIEW



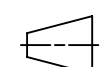


DETAIL L
SCALE 1 : 4



TOP CROP VIEW

TOP
↑
BOTTOM
↓

 ANDREW an Amphenol company				
TITLE SFG22RHDXL SERIES				
SIZE C	SCALE 1:32	DOCUMENT NO. SFG22RHDXL		
 		DRAWING		SHEET 8 OF 12
		VERSION 02	STATUS RE	

Confidential

4

3

2

1

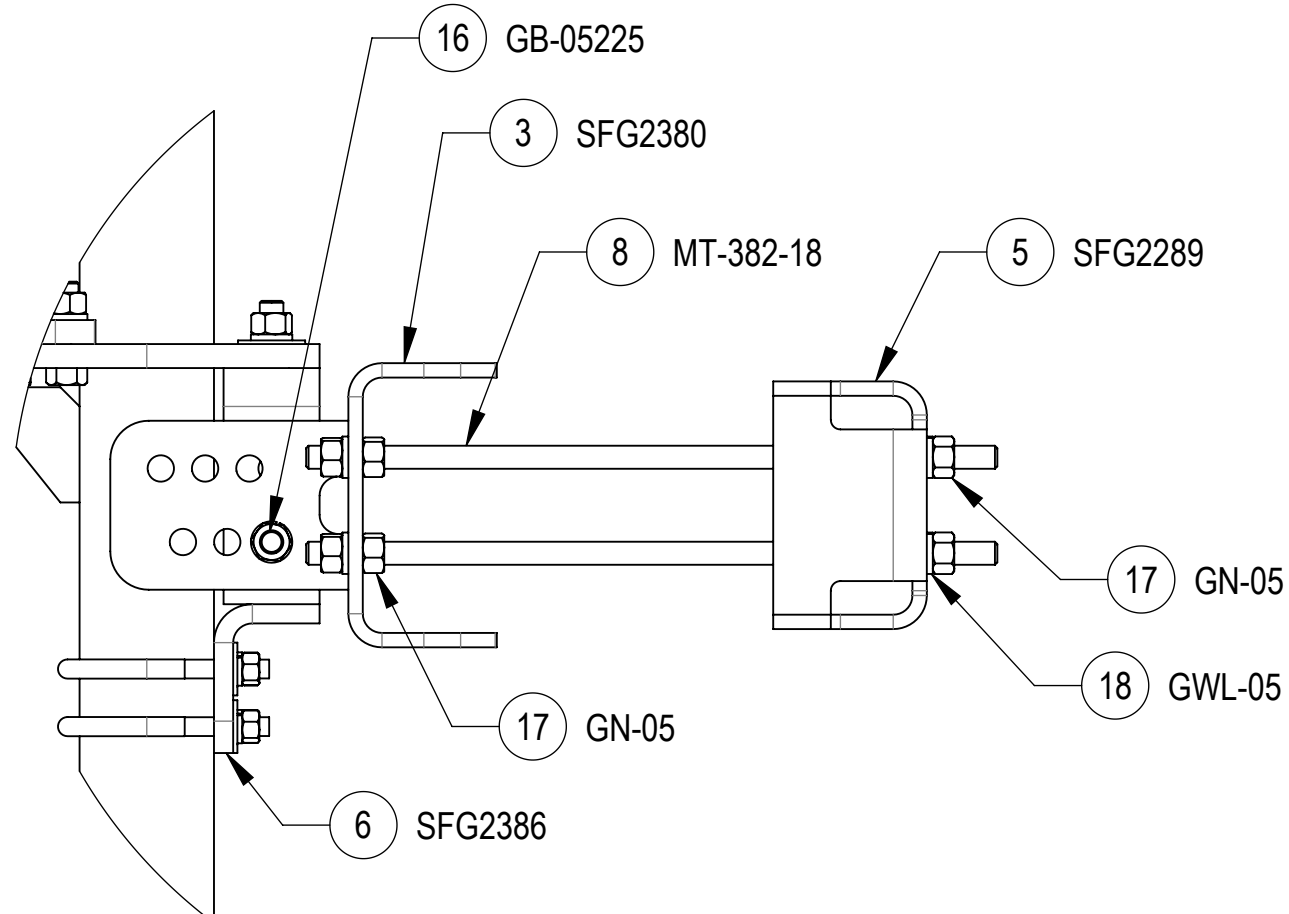
4

3

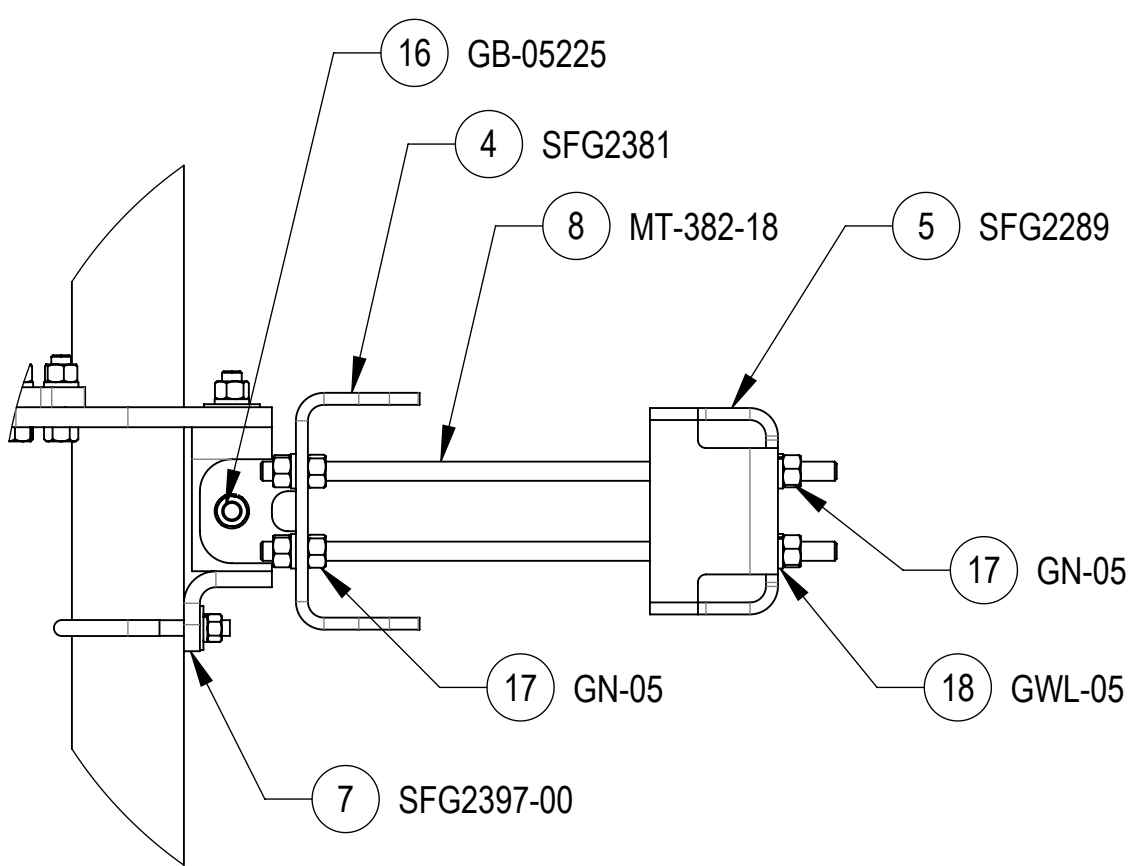
2

1

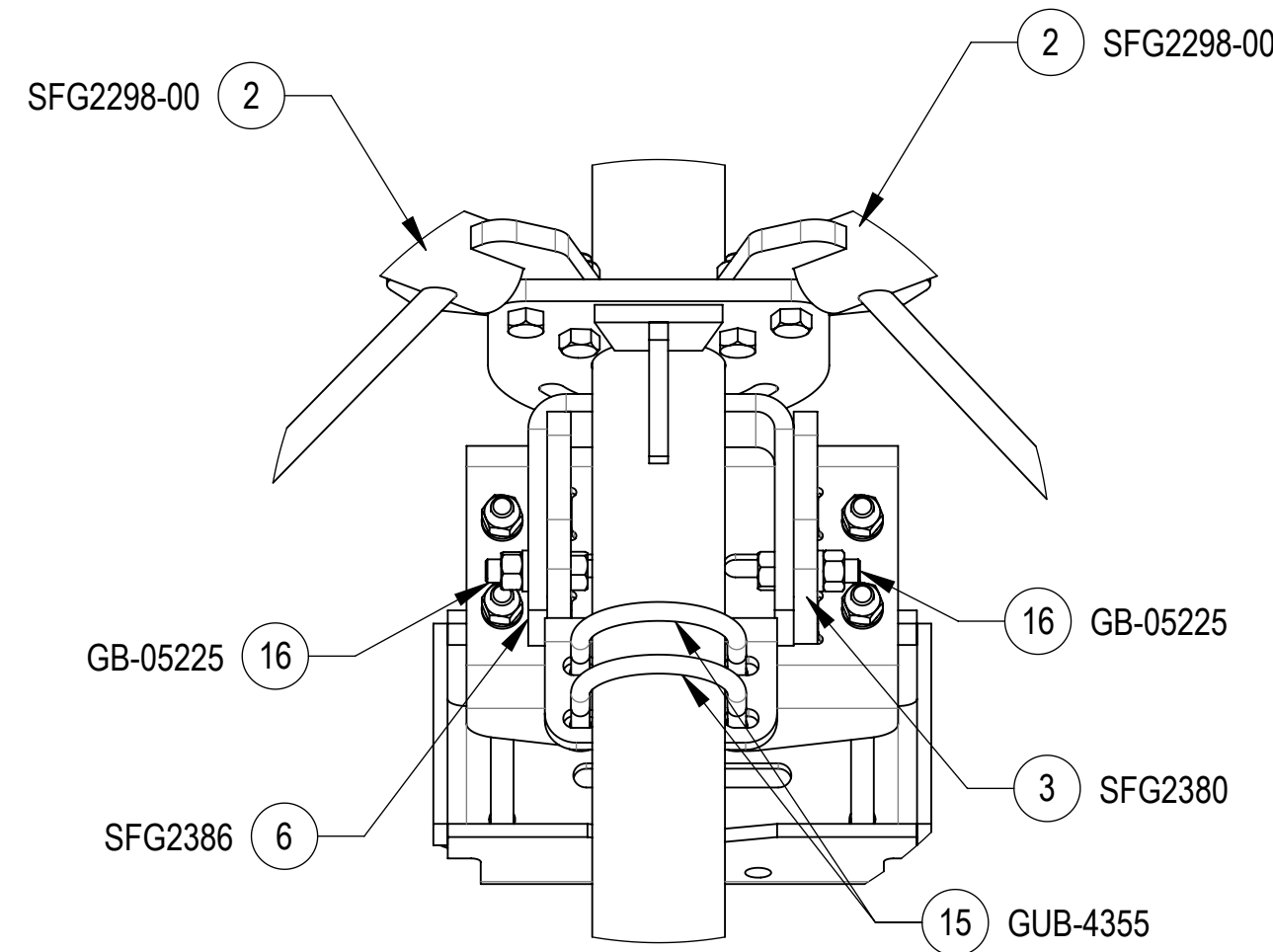
**STEP 3: AT TOP, ATTACH TOP TAPER BRACKET (SFG2380) AZIMUTH/TAPER BRACKET (SFG2386) USING BOLTS KITS (GB-05225)
 AT BOTTOM, ATTACH LOWER TOWER LEG BRACKET (SFG2381) TO AZIMUTH/TAPER BRACKET (SFG2397-00) USING BOLTS KITS (GB-05225)**



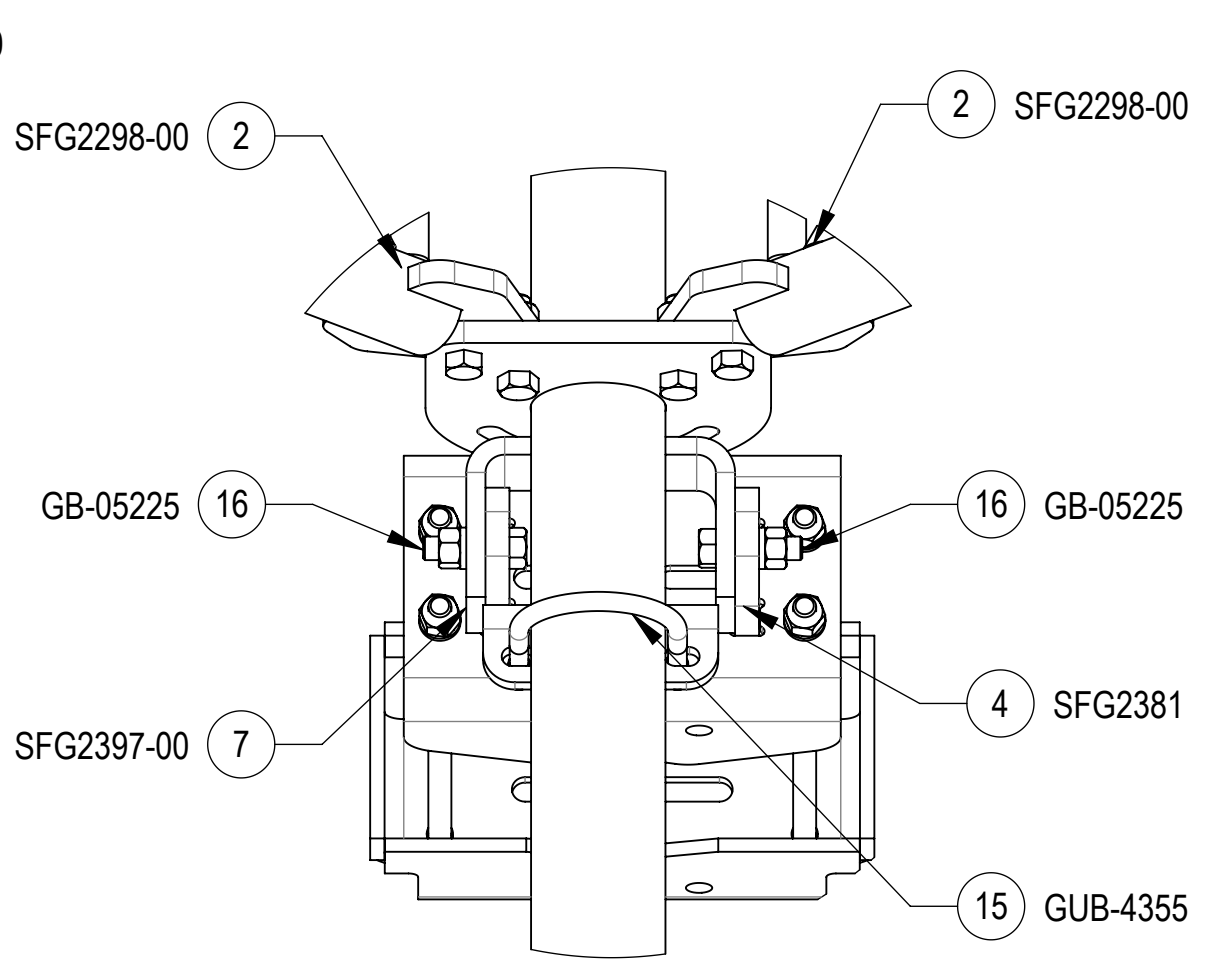
DETAIL N
SCALE 1 : 5



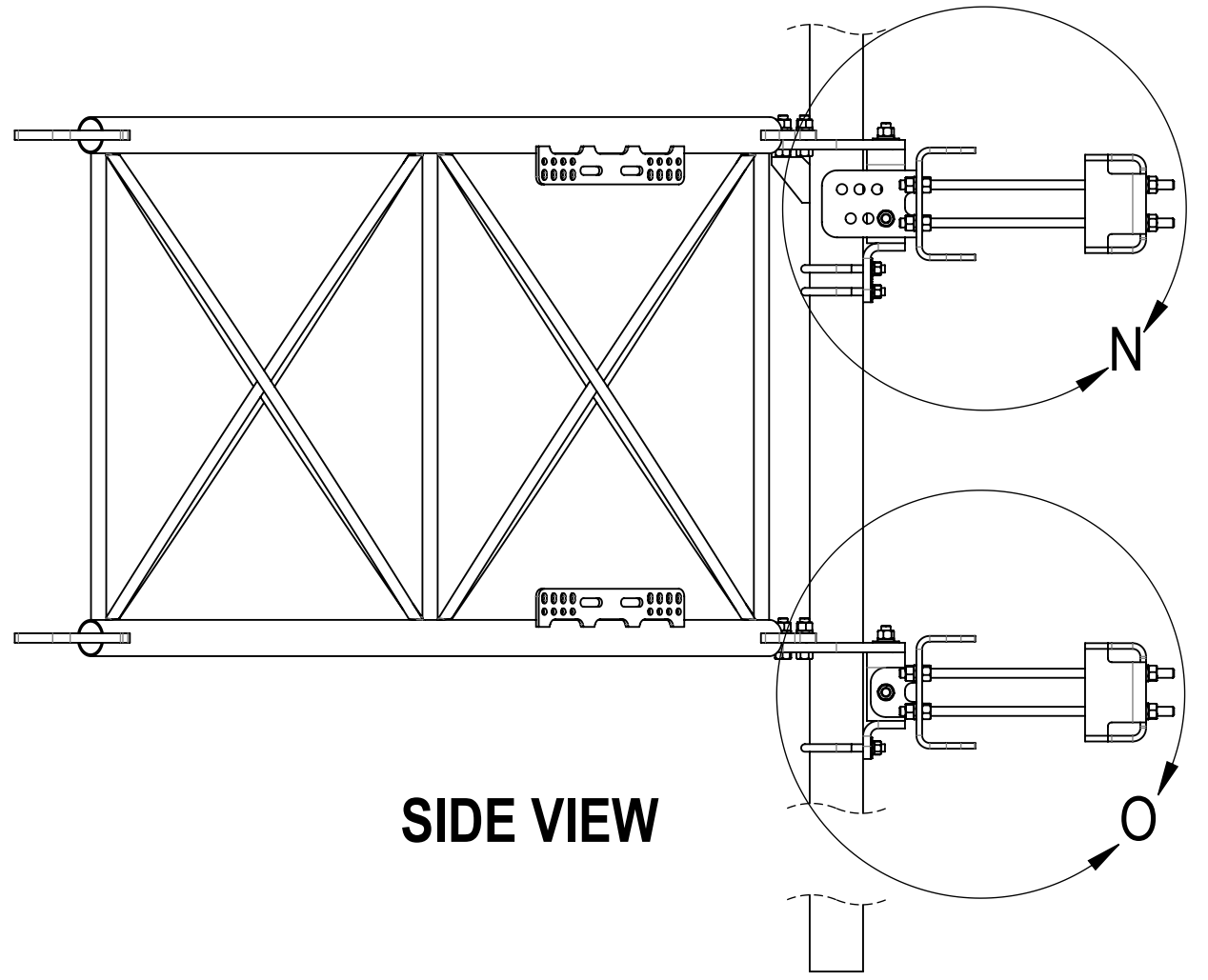
DETAIL O
SCALE 1 : 6



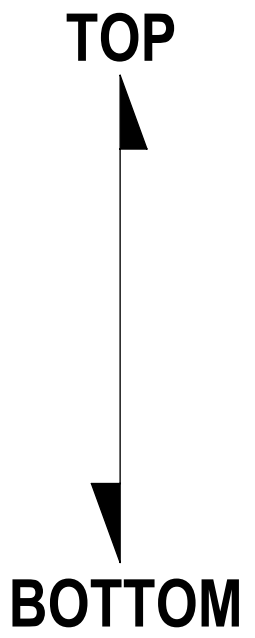
DETAIL ISO TOP ROTATED VIEW
SCALE 1 : 5



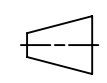


DETAIL ISO BOTTOM ROTATED VIEW
SCALE 1 : 5



SIDE VIEW



 ANDREW an Amphenol company				
TITLE SFG22RHDXL SERIES				
SIZE C	SCALE 1:32	DOCUMENT NO. SFG22RHDXL		
 		DRAWING		SHEET 9 OF 12
		VERSION 02	STATUS RE	

Confidential

4

3

2

1

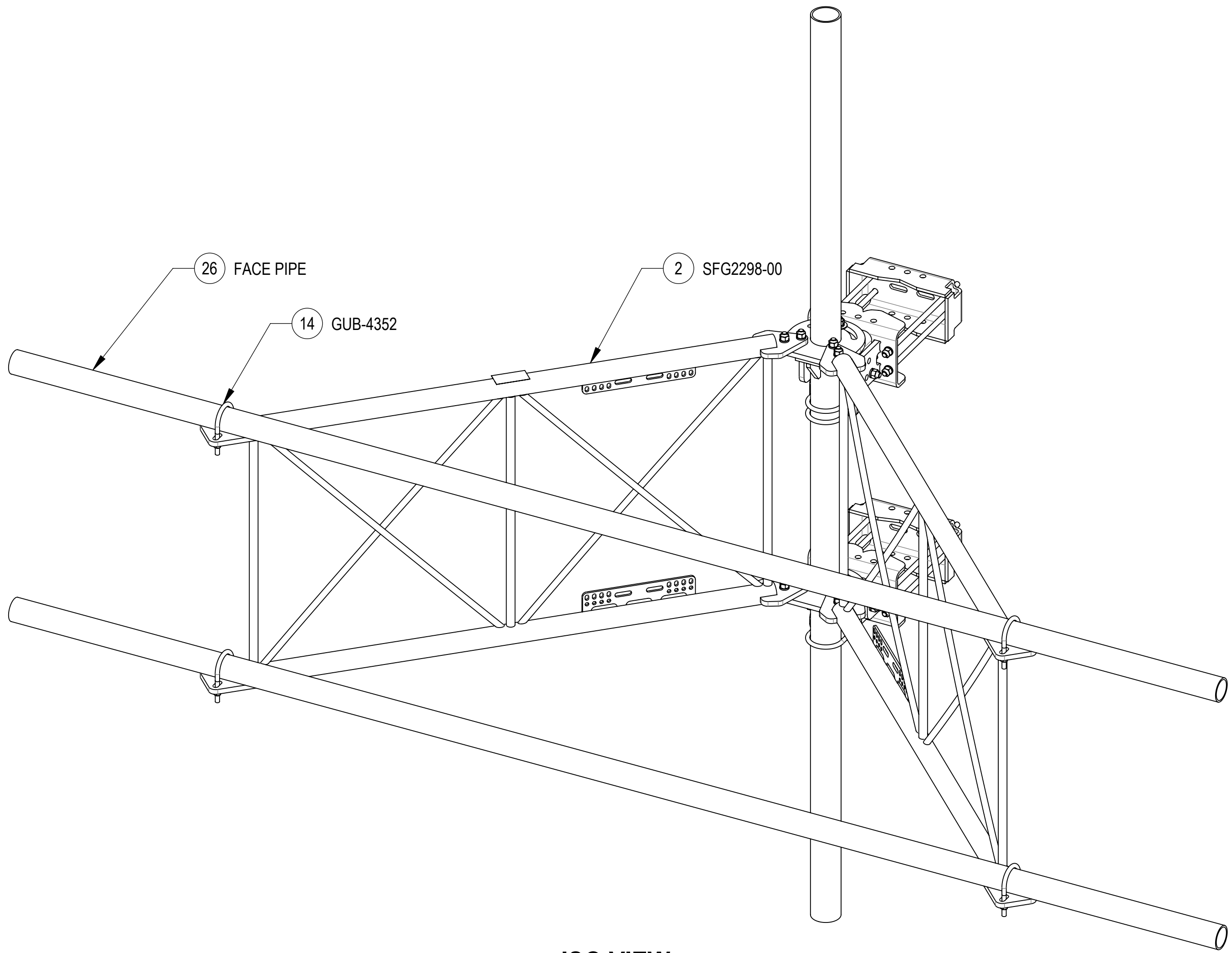
4

3

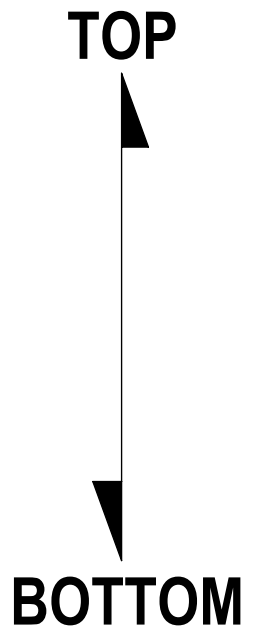
2

1

STEP 4: ATTACH FACE PIPES TO STANDOFF ARMS (SFG2298-00) USING U-BOLTS (GUB-4352)



ISO VIEW



TITLE				
SFG22RHDXL SERIES				
SIZE	SCALE	DOCUMENT NO.		
C	1:32	SFG22RHDXL		
	DRAWING			SHEET
	VERSION	STATUS	REVISION	
	02	RE	C	

Confidential

4

3

2

1

4

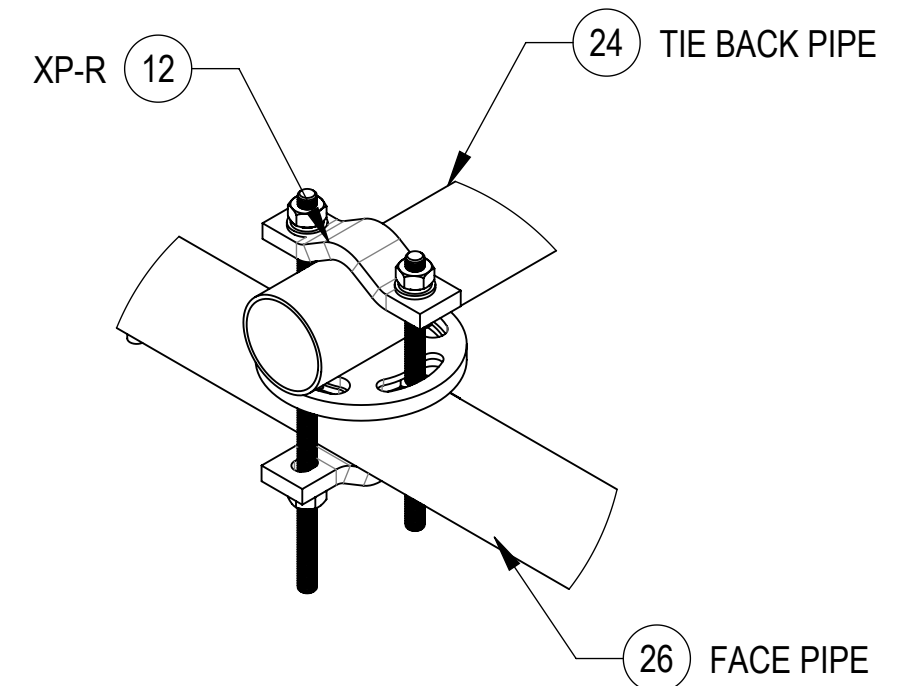
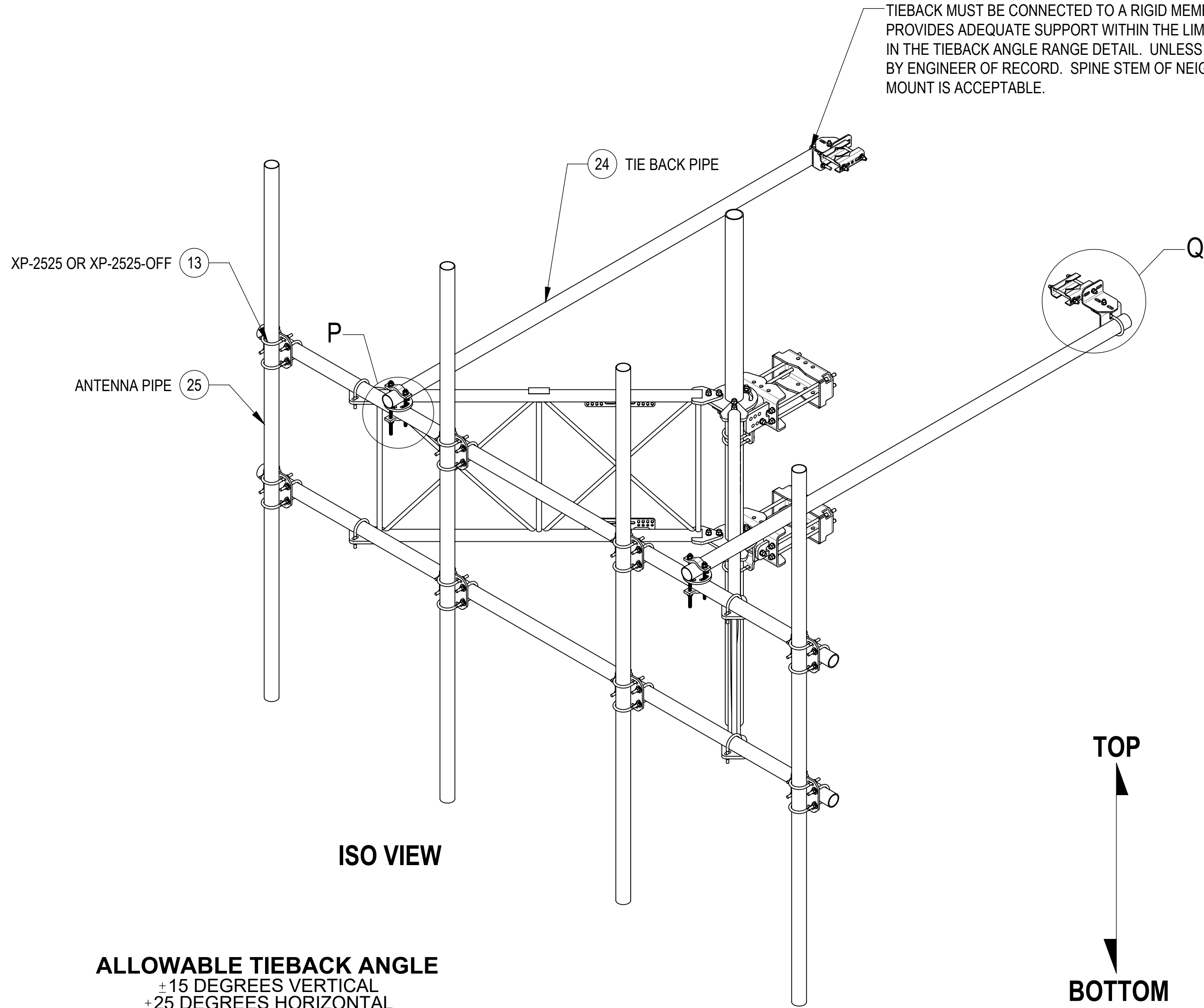
3

2

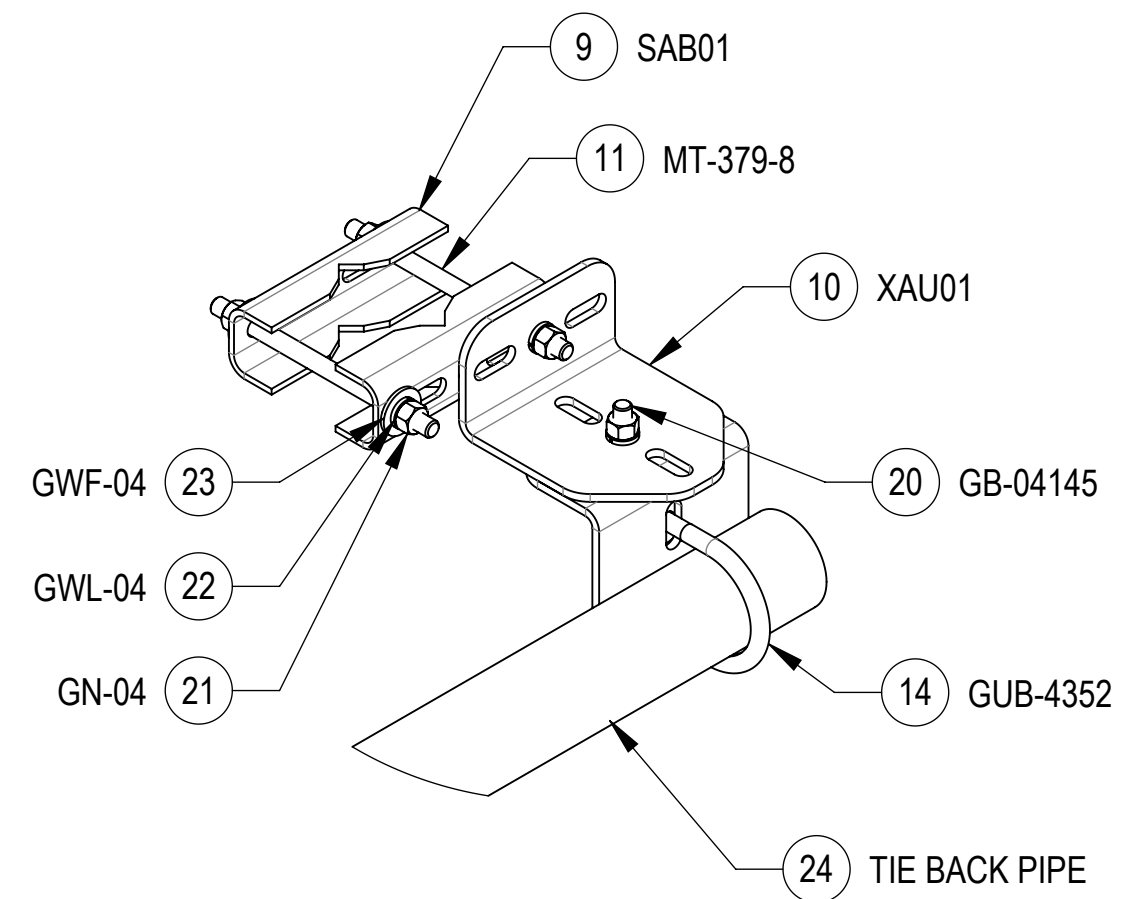
1

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

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.

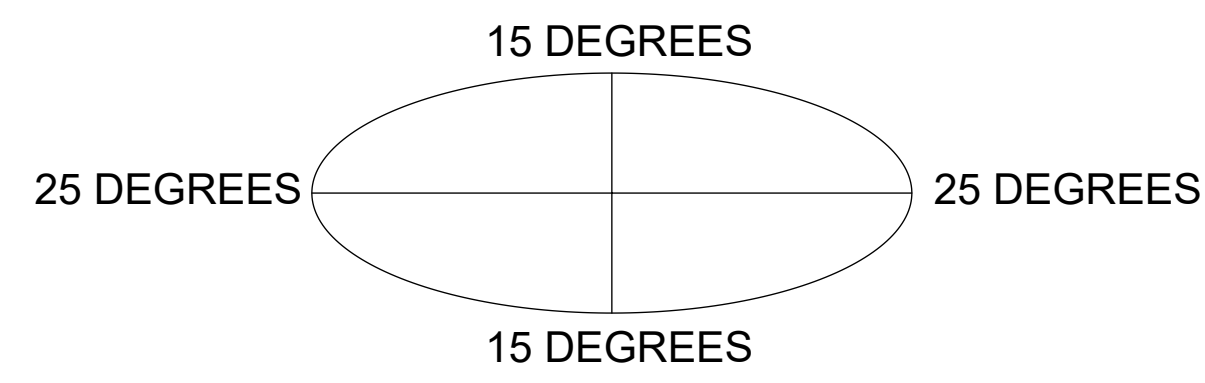




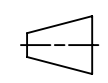
DETAIL P
SCALE 1 : 5



DETAIL Q
SCALE 1 : 5

ALLOWABLE TIEBACK ANGLE
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



 ANDREW an Amphenol company				
TITLE SFG22RHDXL SERIES				
SIZE C	SCALE 1:32	DOCUMENT NO. SFG22RHDXL		
 		DRAWING		SHEET 11 OF 12
		VERSION 02	STATUS RE	

Confidential

4

3

2

1

4

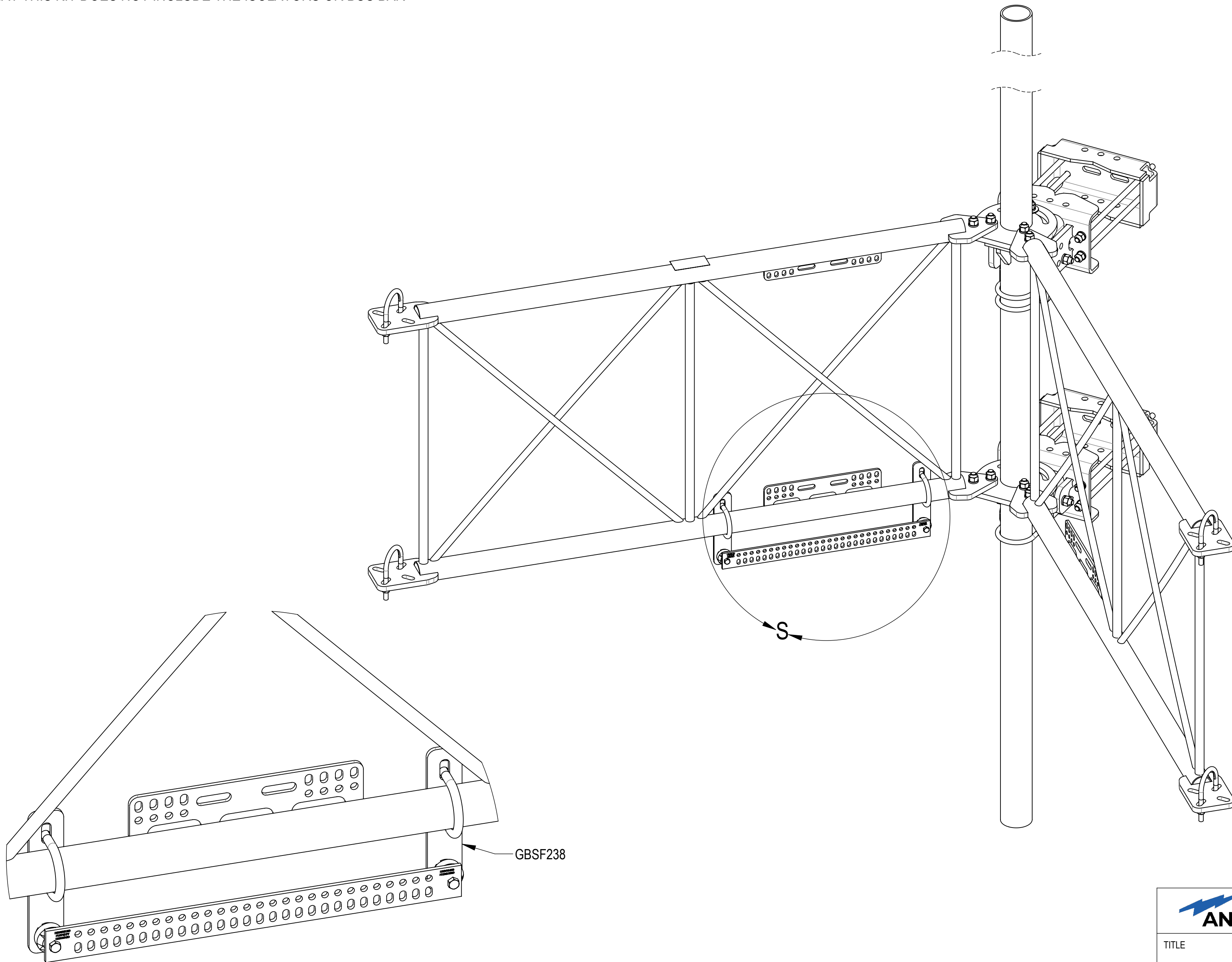
3

2

1

OPTIONAL ACCESSORIES:

BUS BAR MOUNT KIT GBSF238 IS WELL SUITED TO BE USED SHOULD THE NEED ARISE
NOTE THAT THIS KIT DOES NOT INCLUDE THE ISOLATORS OR BUS BAR



DETAIL S
SCALE 1 : 4

GBSF238



TITLE		SFG22RHDXL SERIES		
SIZE	SCALE	DOCUMENT NO.		
C	1:24	SFG22RHDXL		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
		02	RE	C

Confidential

4

3

2

1