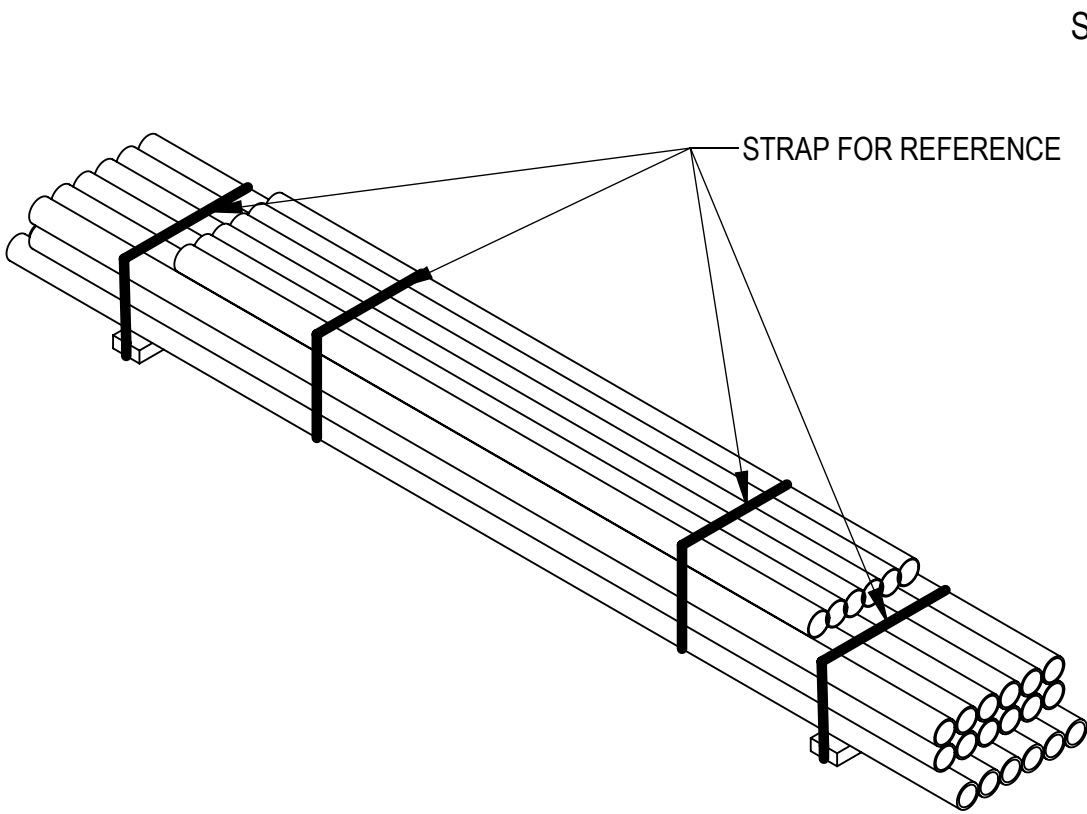
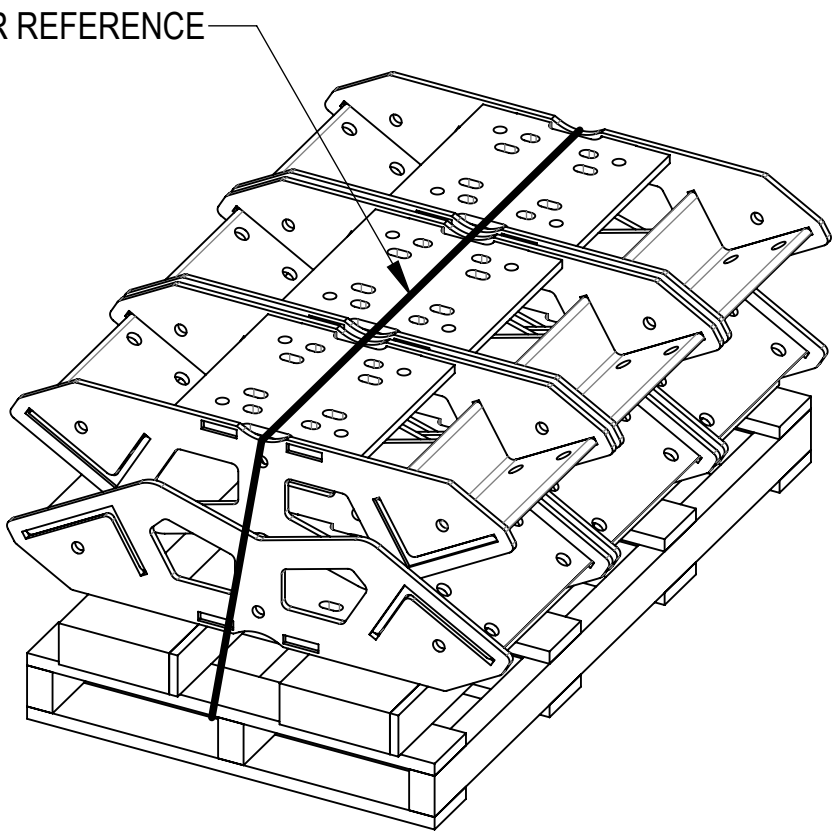


- 1.0 GENERAL NOTES
- 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
- 1.2 FOR PATENT INFO: <https://www.adwpat.com>
- 2.0 DESIGN NOTES
- 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING THE APPURTENANCE. ADDITIONAL PRODUCTS MAY BE REQUIRED 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 FITS MONOPOLES 15" TO 50" OD.
- 2.3 MIN RECOMMENDED POLE THICKNESS 0.188[4.78].
- 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.

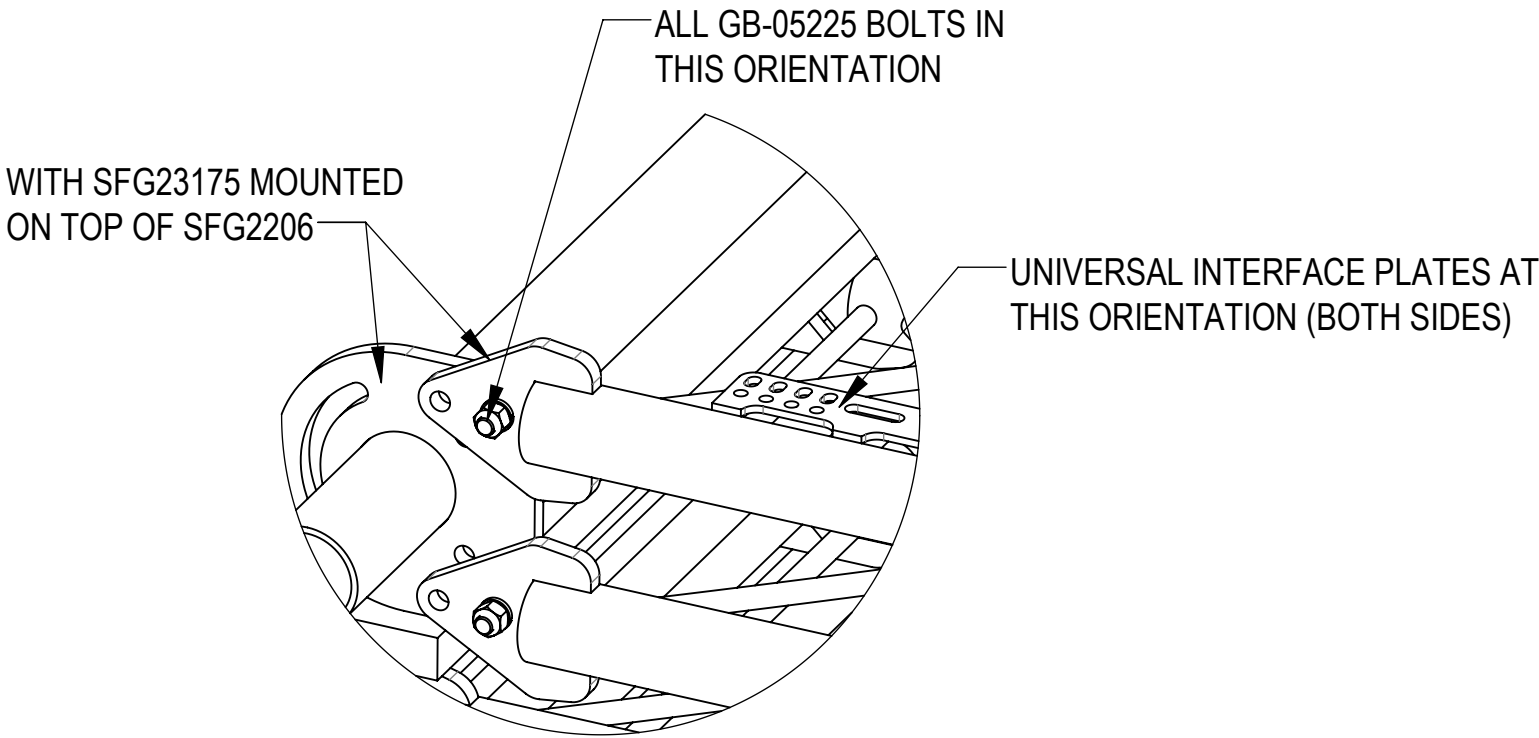
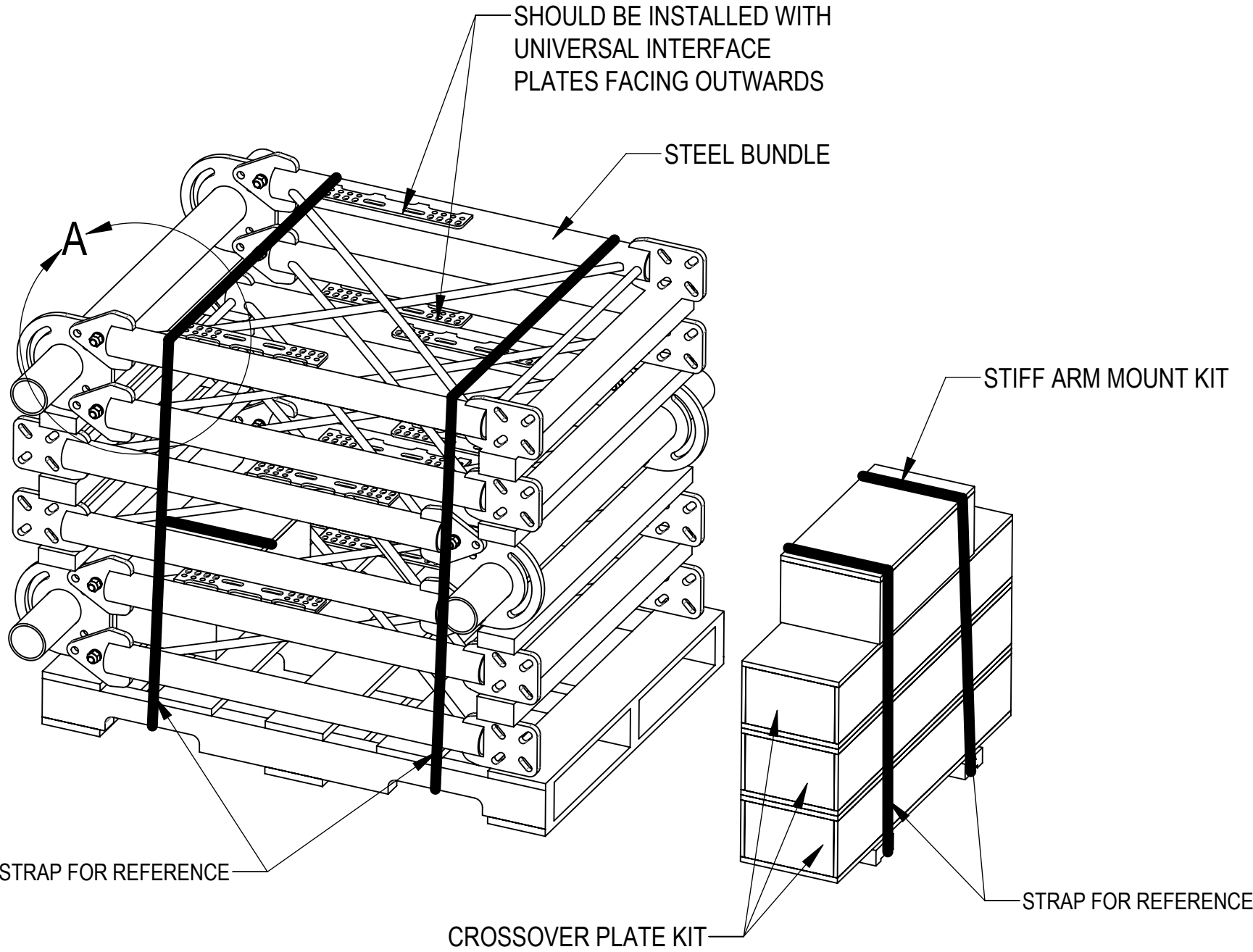
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	JL1183 01JUN22	BA1025 40149022CMO
B	UPDATED DRAWING TO NEW FORMAT; CHANGED BOM STRUCTURE; MOVED LOCATION OF SFG2350 TO THE TOP OF STANDOFF ARM.	RY1002 16JAN24	YW1045 40185674CMO
C	UPDATED SFG23175 TO ADD UNIVERSAL INTERFACE PLATES	RY1002 08JUL24	XK1001 40199604CMO
D	SHEET 4&8: ADDED AZIMUTH ADJUSTMENT RANGE VIEW & NOTE	JL1183 10JAN25	BA1025 40212102CMO



PIPE BUNDEL



RING MOUNT



DETAIL A
SCALE 1 : 6



ANDREW® an Amphenol company

TOLERANCES		SAP MATERIAL MASTER					
1 PLACE .X[X] ± 0.2[5]	3 PLACE .XXX[X] ± 0.060[1.50]	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	MCG23HDX SECTOR FRAME SERIES			
		CE JL1183	06/01/2022				
		RW RY1002	06/19/2025				
		AD YMENG	06/19/2025				
		RE YMENG	06/19/2025				
ECN 40212102CMO		TITLE		MCG23HDX			
SIZE		Auth Group INSL					
DENSITY		lbs/in³		SCALE 2:1		DOCUMENT NO.	
MASS		lbs		1 OF 10			
VOLUME		in³					
SURFACE AREA		in²					
HEIGHT		LENGTH		DRAWING		SHEET	
WIDTH		C		VERSION 03 STATUS RE REVISION D		VERSION 03 STATUS RE REVISION D	

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PART NUMBERS, WEIGHTS, & EPA

TABLE 1: CONFIGURATIONS

PART NUMBER	DESCRIPTION	WEIGHT (LBS)	(EPA)A (FT²)*	(EPA)A W/ 1/2" ICE THICKNESS (FT²)*	ANTENNA PIPES	INCLUDED PARTS																											
						MC-RM1550-3D	MCG23HDX-HK02	MCG23HDX-SB01	PB12TEK0607B0610P	PB0607B1210K0610P	PB0607B1208K0610P	PB09TEK0607B0610P	PB0607B0910K0610P	PB0607B0908K0610P	PB0607B0610P	PB12TEK0607B0612P	PB0607B1210K0612P	PB0607B1208K0612P	PB0607B09TEK0612P	PB0607B0910K0612P	PB0607B0908K0612P	PB0607B0612P	PB12TEK0607B0614P	PB0607B1210K0614P	PB0607B1208K0614P	PB15TEK0607B0614P	PB0607B1510K0614P	PB0607B1508K0614P	PB0607B0614P	XP-2525-4	XP-2525-6	XP-2525-8	SFG2350
MCG23HDX-10M12120	G23HDX MP, 10' FACE, (12) 120" AP	2642.53	17.68	25.75	12	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	
MCG23HDX-10M12126	G23HDX MP, 10' FACE, (12) 126" AP	2685.67			12	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
MCG23HDX-10M1296	G23HDX MP, 10' FACE, (12) 96" AP	2504.65			12	1	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
MCG23HDX-10M9120	G23HDX MP, 10' FACE, (9) 120" AP	2419.95			9	1	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-10M9126	G23HDX MP, 10' FACE, (9) 126" AP	2452.30			9	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-10M996	G23HDX MP, 10' FACE, (9) 96" AP	2316.54			9	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-10MB	G23HDX MP, 10' FACE, NO AP	1752.21			-	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
MCG23HDX-12M12120	G23HDX MP, 12' FACE, (12) 120" AP	2734.80	18.96	27.44	12	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	
MCG23HDX-12M12126	G23HDX MP, 12' FACE, (12) 126" AP	2777.93			12	1	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
MCG23HDX-12M1296	G23HDX MP, 12' FACE, (12) 96" AP	2596.91			12	1	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
MCG23HDX-12M9120	G23HDX MP, 12' FACE, (9) 120" AP	2512.22			9	1	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-12M9126	G23HDX MP, 12' FACE, (9) 126" AP	2544.57			9	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-12M996	G23HDX MP, 12' FACE, (9) 96" AP	2408.80			9	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	-	3
MCG23HDX-12MB	G23HDX MP, 12' FACE, NO AP	1844.48			-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3
MCG23HDX-14M12120	G23HDX MP, 14' FACE, (12) 120" AP	2827.06	20.23	29.14	12	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	3	
MCG23HDX-14M12126	G23HDX MP, 14' FACE, (12) 126" AP	2870.20			12	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	3	3
MCG23HDX-14M1296	G23HDX MP, 14' FACE, (12) 96" AP	2689.18			12	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	3	3
MCG23HDX-14M15120	G23HDX MP, 14' FACE, (15) 120" AP	3049.64			15	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3	3	-	3	
MCG23HDX-14M15126	G23HDX MP, 14' FACE, (15) 126" AP	3103.56			15	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	3	-	3	
MCG23HDX-14M1596	G23HDX MP, 14' FACE, (15) 96" AP	2877.28			15	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	3	-	3	
MCG23HDX-14MB	G23HDX MP, 14' FACE, NO AP	1936.74			-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3	

* (EPA)A DOES NOT INCLUDE ANTENNA PIPES AND MOUNTING HARDWARE. IF DESIRED, ADD ANTENNA PIPE PER TABLE 2

TABLE 2: EPA OF EACH ANTENNA PIPE

ANTENNA PIPE	(EPA)A (FT²)	(EPA)A W/ 1/2" ICE THICKNESS (FT²)
2-7/8" X 96"	1.84	2.48
2-7/8" X120"	2.30	3.10
2-7/8" X126"	2.42	3.26

- NOTE:
- ANTENNA PIPES ARE CONSIDERED SEPARATELY.
 - KA FACTOR OF 3-SECTOR EPA INCLUDED.
 - 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, MCG23HDX-10M12120 HAS A 3-SECTOR EPA OF 17.68 FT² WITH NO ICE PLUS 12 ANTENNA PIPES WITH A 3-SECTOR EPA OF 12X2.30=27.60 FT² WITH NO ICE.
SO, THE TOTAL EPA OF 45.28 FT² FOR THE MCG22HDX-10M12120.



TITLE

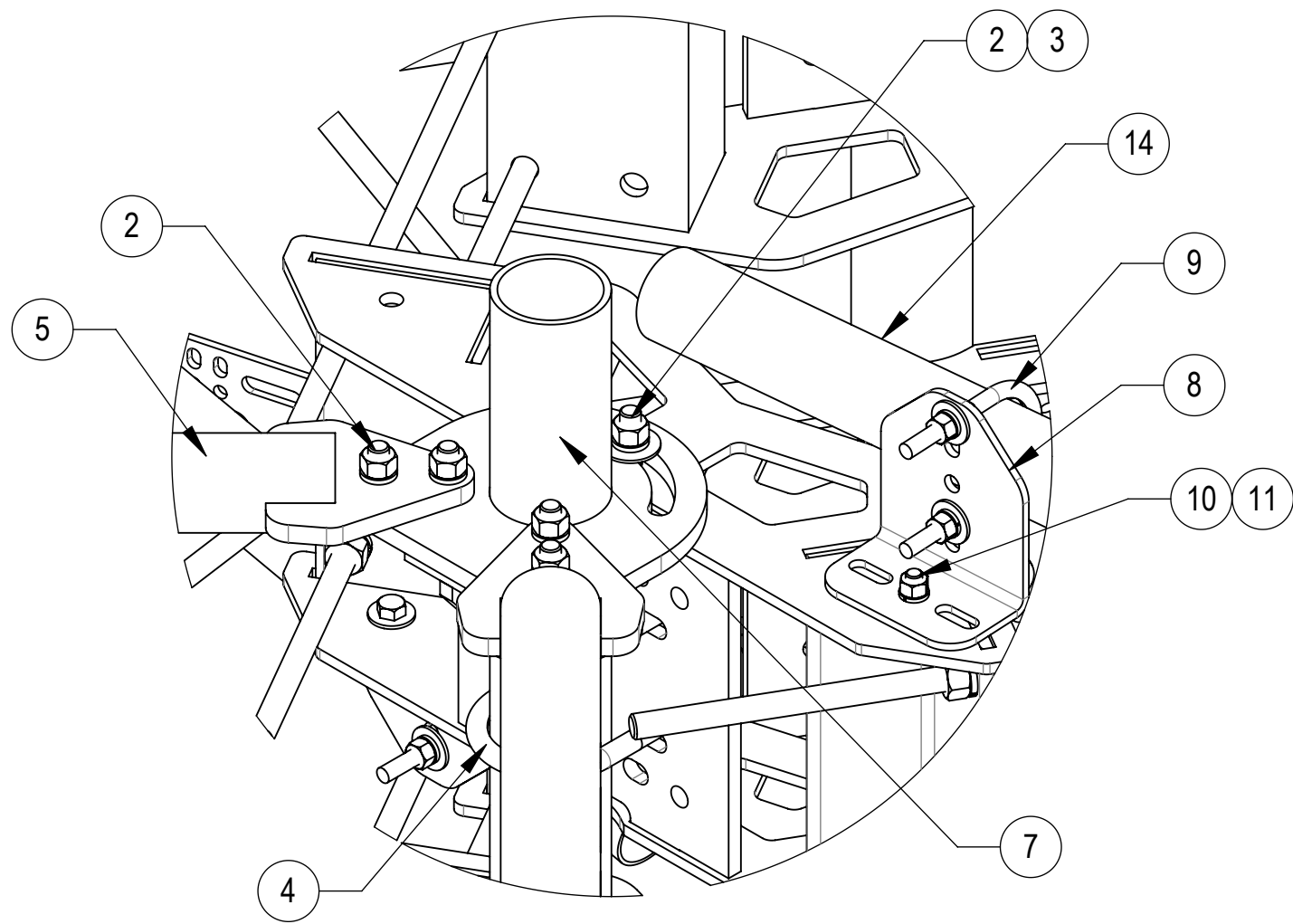
MCG23HDX SECTOR FRAME SERIES

SIZE **C** SCALE **1:30** DOCUMENT NO. **MCG23HDX**



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VERSION	STATUS	REVISION	
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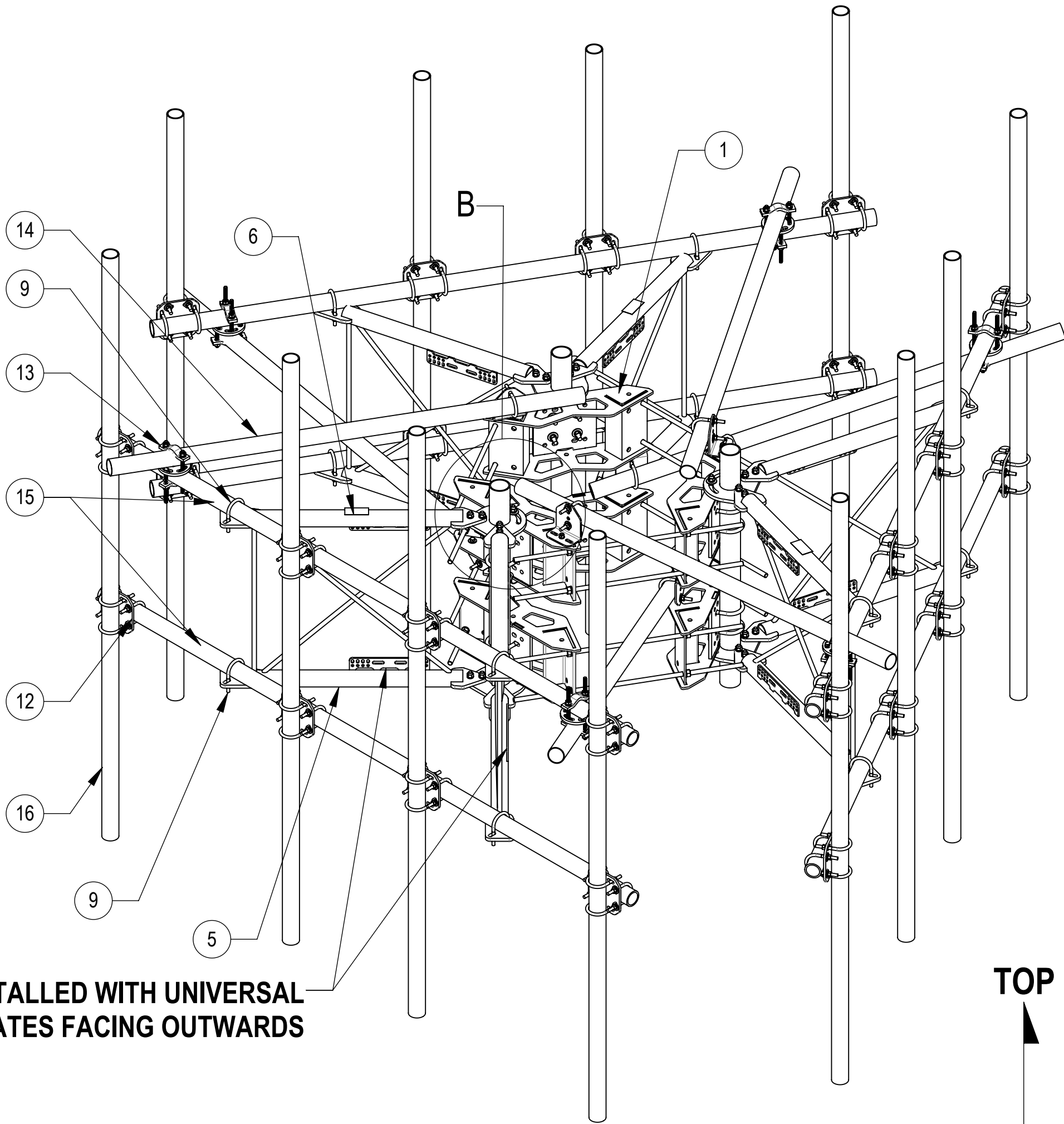
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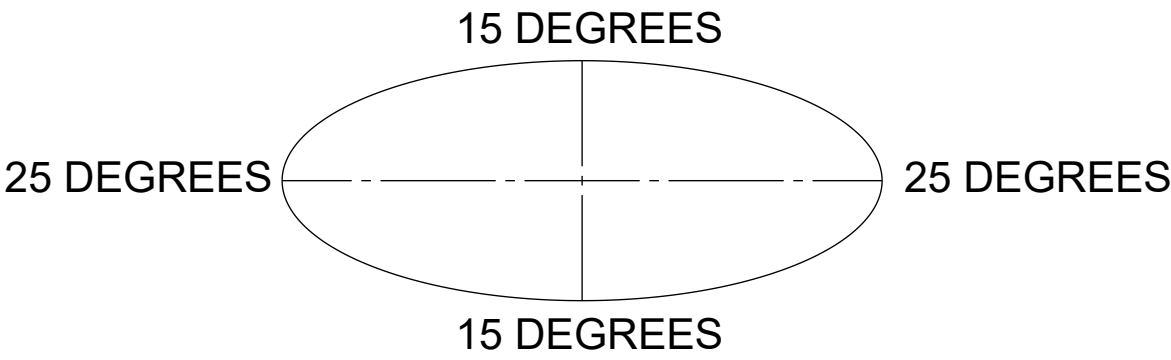
DETAIL B
SCALE 1 : 5

MCG23HDX-10M12120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE)

**SHOULD BE INSTALLED WITH UNIVERSAL
INTERFACE PLATES FACING OUTWARDS**



ALLOWABLE TIEBACK ANGLE
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



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

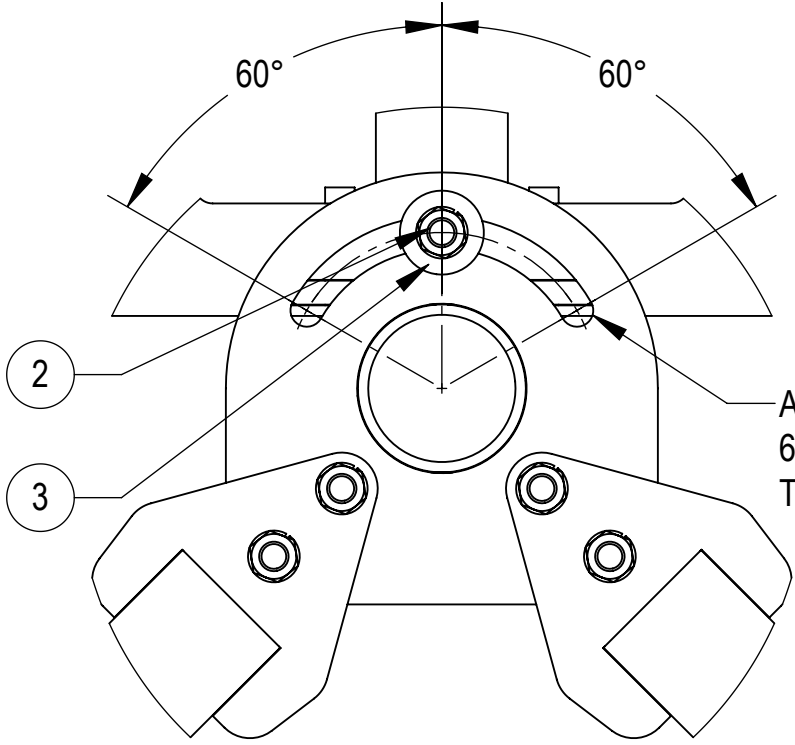
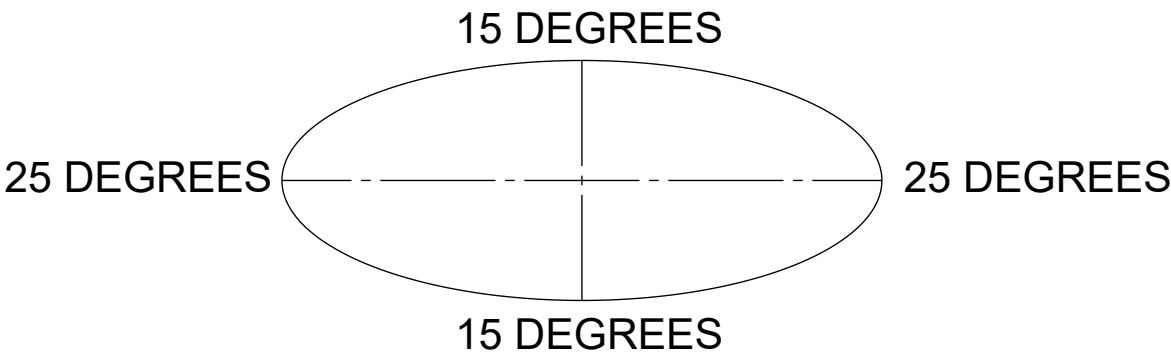
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	MC-RM1550-3	15" - 50" OD RINGMOUNT	2	229.90 LBS	
2	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	30	0.28 LBS	
3	GWf-05	5/8" GALV FLAT WASHER, 1.7OD	6	0.06 LBS	
4	GUB-53560	5/8" X 3-5/8" X 6" GALV U-BOLT	12	1.30 LBS	
5	SFG23175	ARM STANDOFF SFG23	6	66.61 LBS	
6	SFG2350	LABEL, SFG23HDX	3	0.03 LBS	
7	SFG2206	WELDMENT, ARM MOUNT	3	51.60 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	18	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	MT546084120	2.88" OD X 84" LONG PIPE	6	24.81 LBS	
15	MT546126276	PIPE, 2.875"OD X 126"	6	80.73 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
16	MT546120	PIPE, 2.875"OD X 120"	12	57.45 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING

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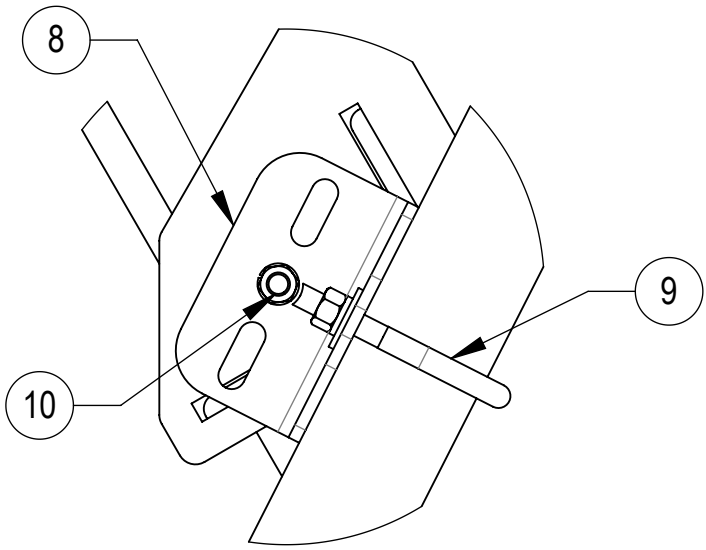
				
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SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX		
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		REVISION D		SHEET 3 OF 10

ALLOWABLE TIEBACK ANGLE

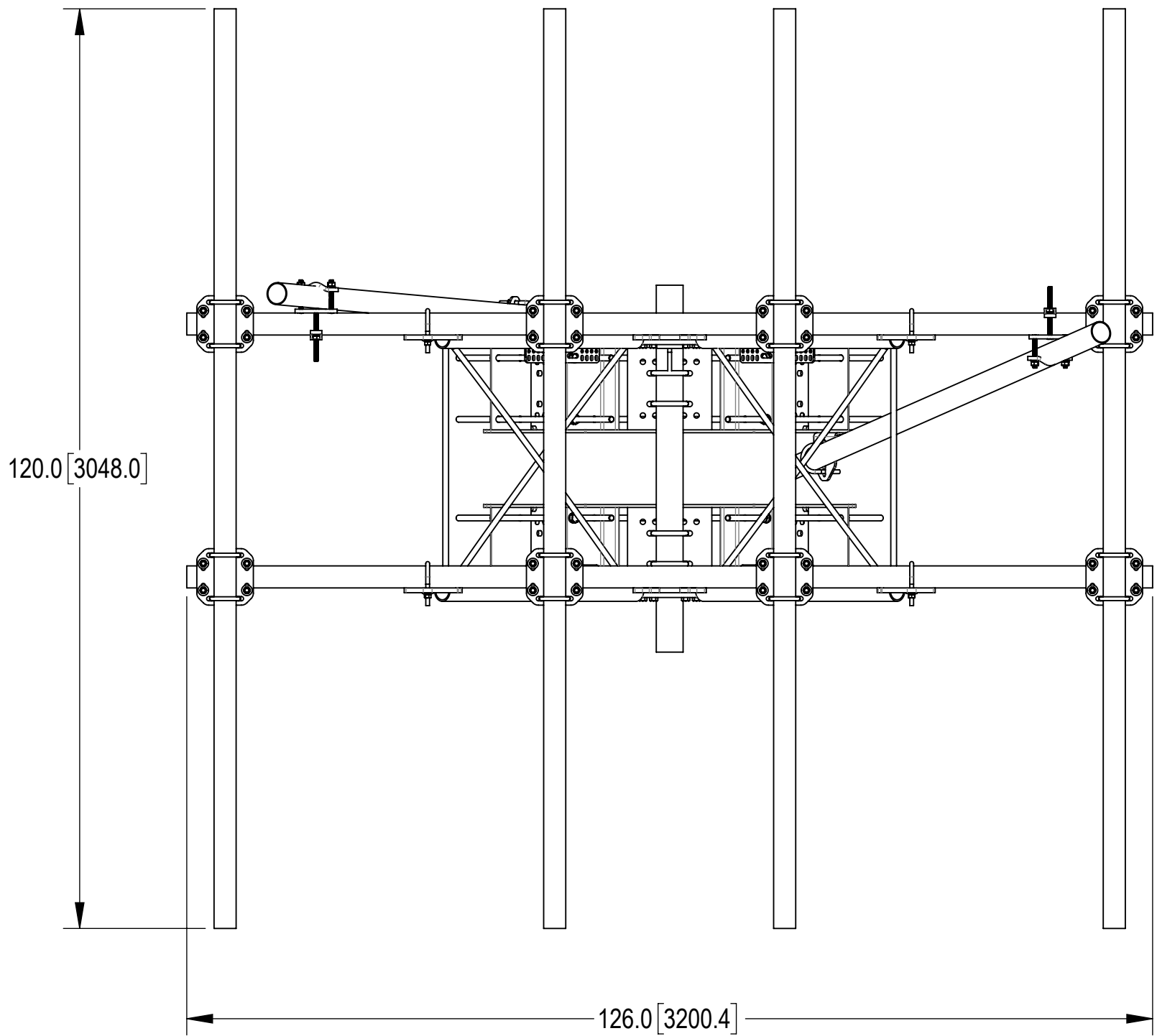
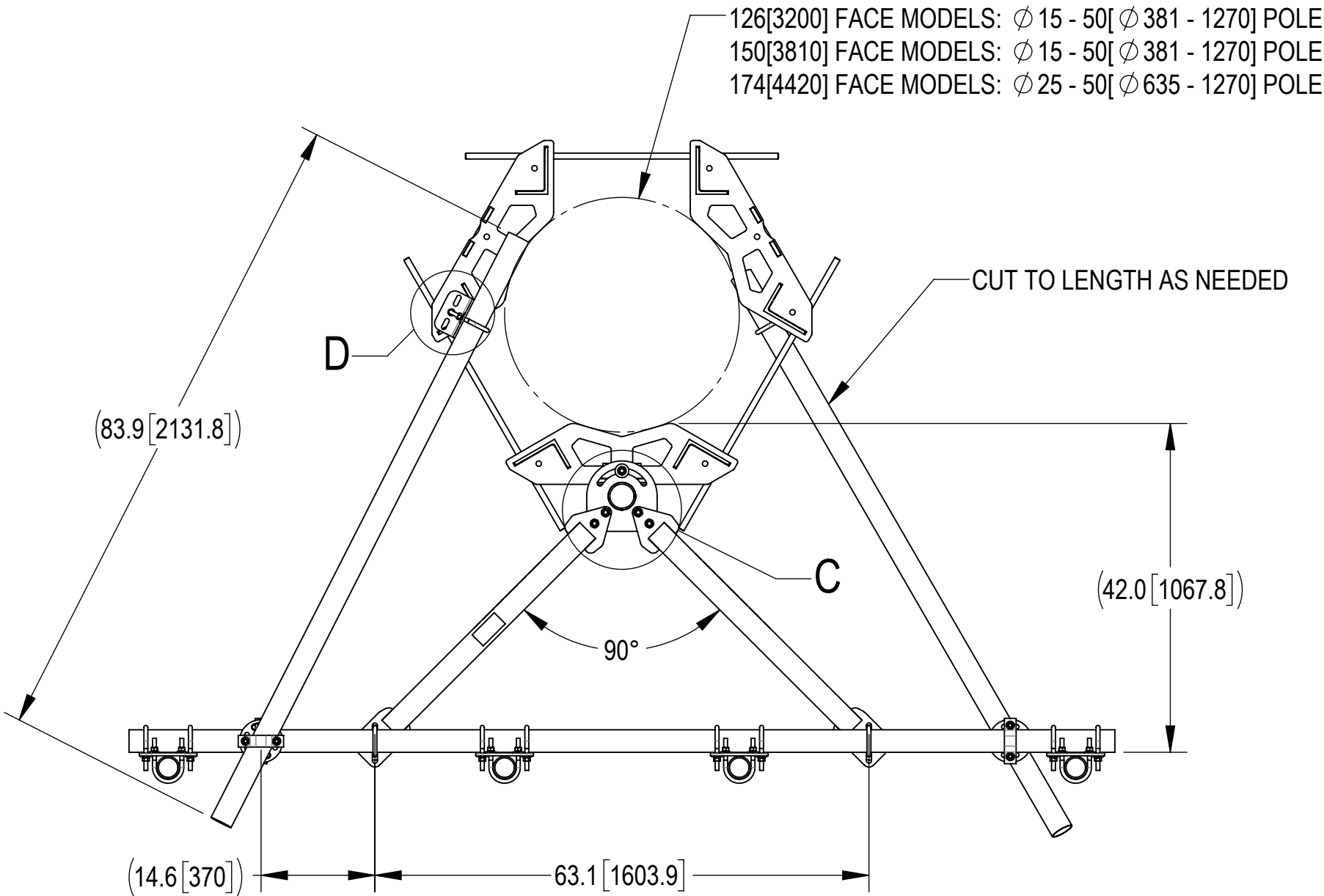
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



DETAIL C
SCALE 1 : 4

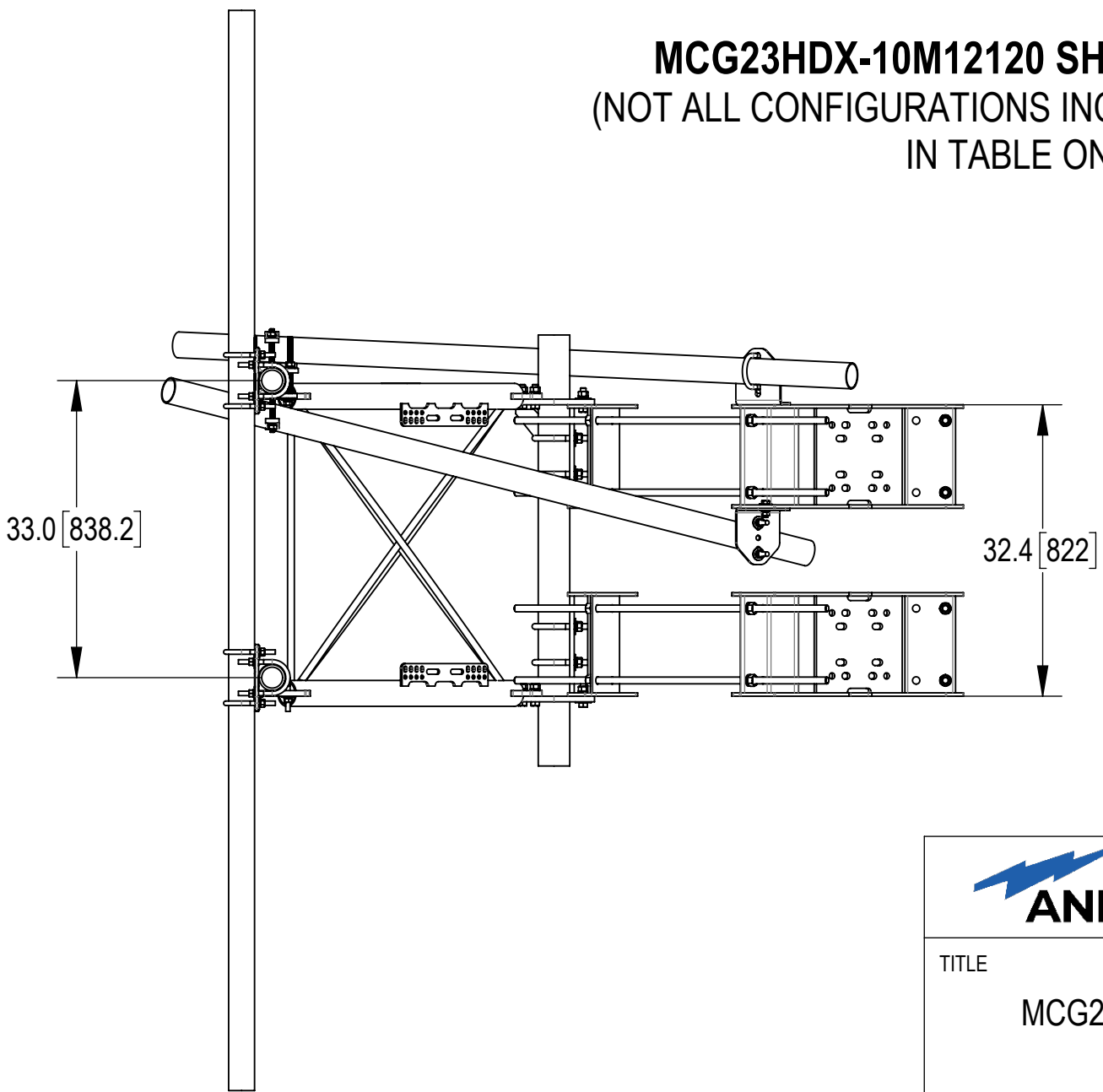


DETAIL D
SCALE 1 : 4



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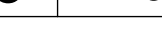
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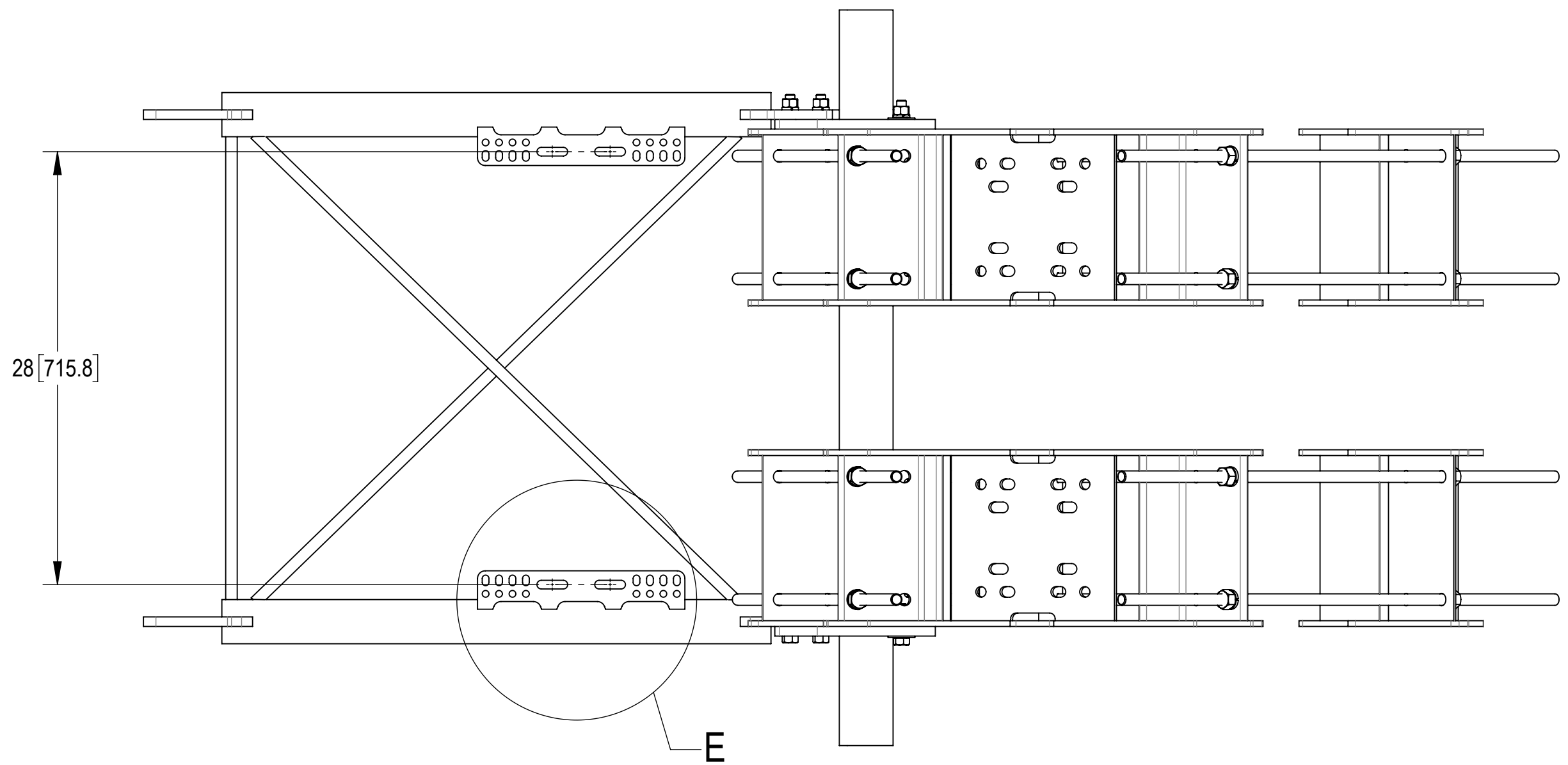
MCG23HDX-10M12120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES
IN TABLE ON SHEET 3)



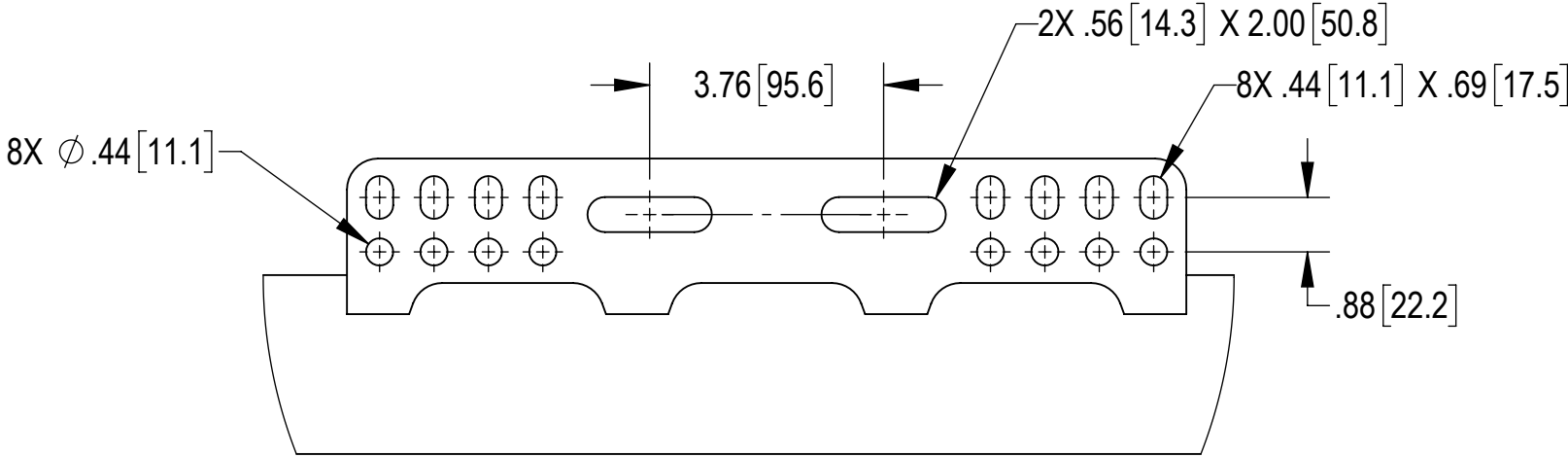
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MCG23HDX SECTOR FRAME SERIES

SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX			
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		VERSION	STATUS	REVISION	
		03	RE	D	

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SIDE VIEW



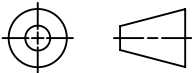
DETAIL E
SCALE 1 : 3



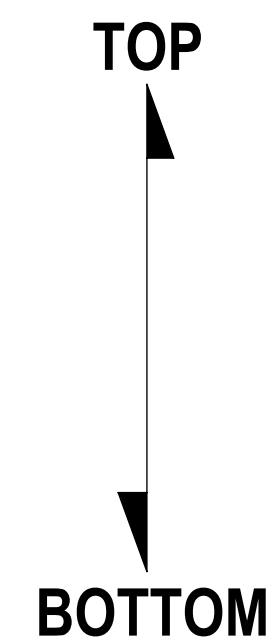
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MCG23HDX SECTOR FRAME SERIES

SIZE	SCALE	DOCUMENT NO.			SHEET
C	1:10	MCG23HDX			
	DRAWING			5 OF 10	
	VERSION	STATUS	REVISION		
	03	RE	D		

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ATTACH LABEL (SFG2350) ON TOP OF STANDOFF ARMS (SFG23175). (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER BEFORE APPLYING LABEL)



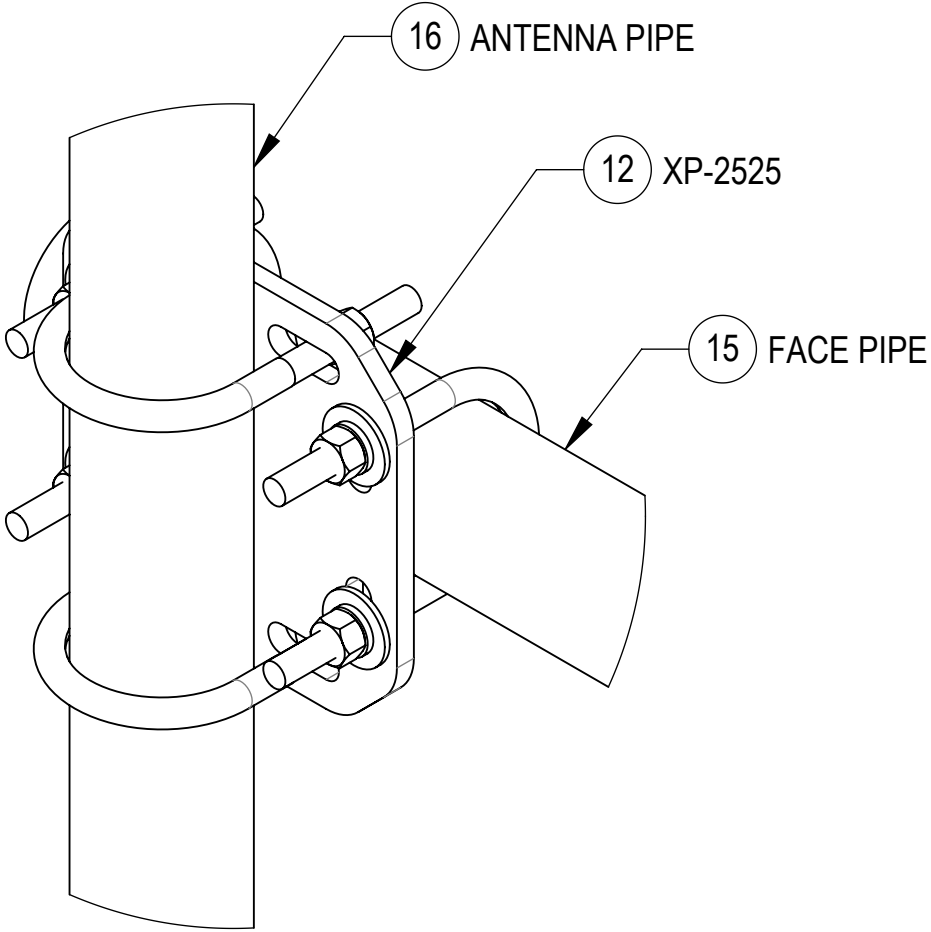
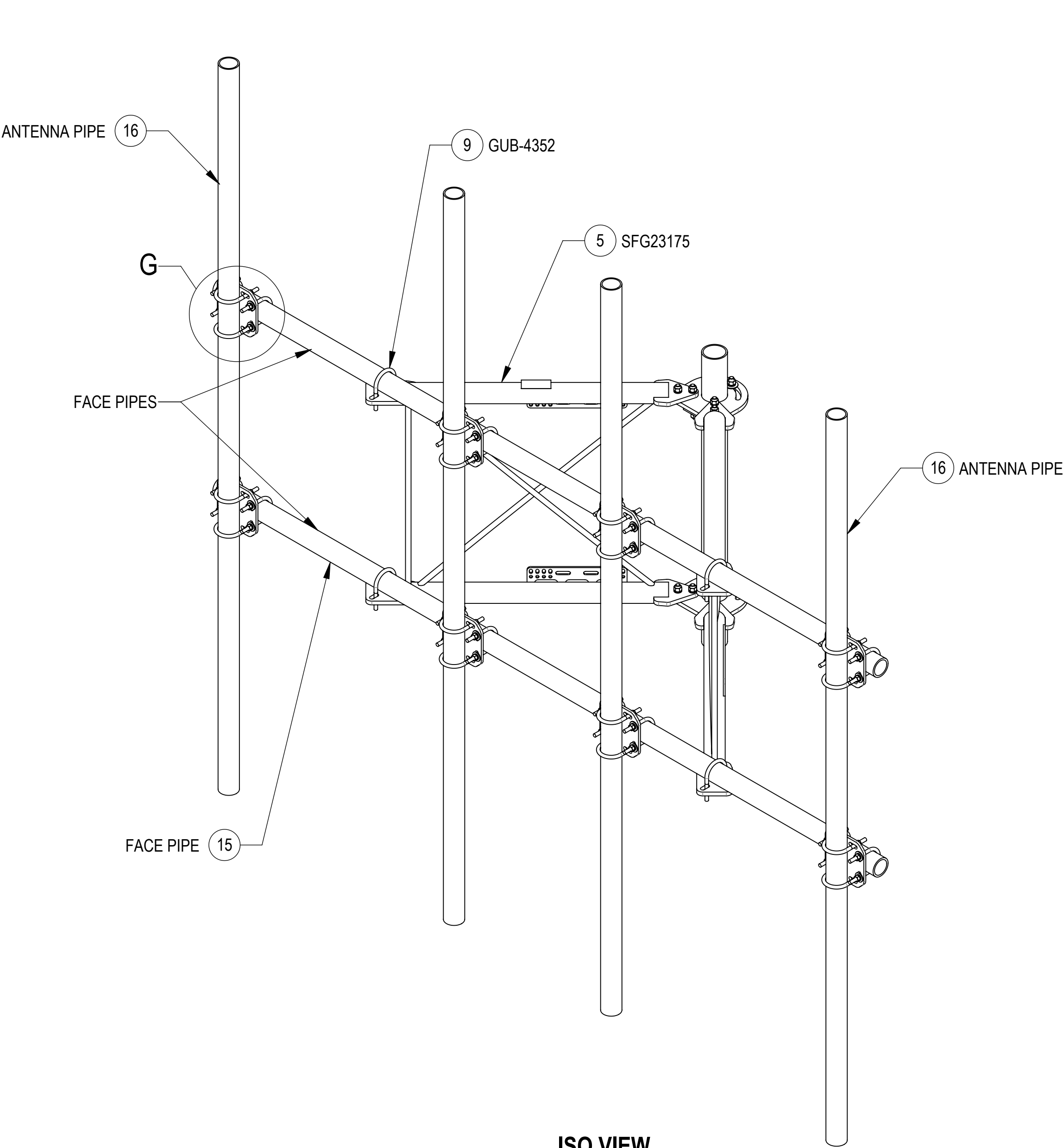
ISO VIEW



SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX			
		DRAWING			SHEET 6 OF 10
		VERSION	STATUS	REVISION	
		03	RE	D	

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STEP 2: ATTACH FACE PIPES TO STANDOFF ARMS (SFG23175) USING U-BOLTS (GUB-4352)
AND THEN ATTACH ANTENNA PIPES TO FACE PIPES USING (XPU01) CROSSOVER PLATE KITS (XP-2525).

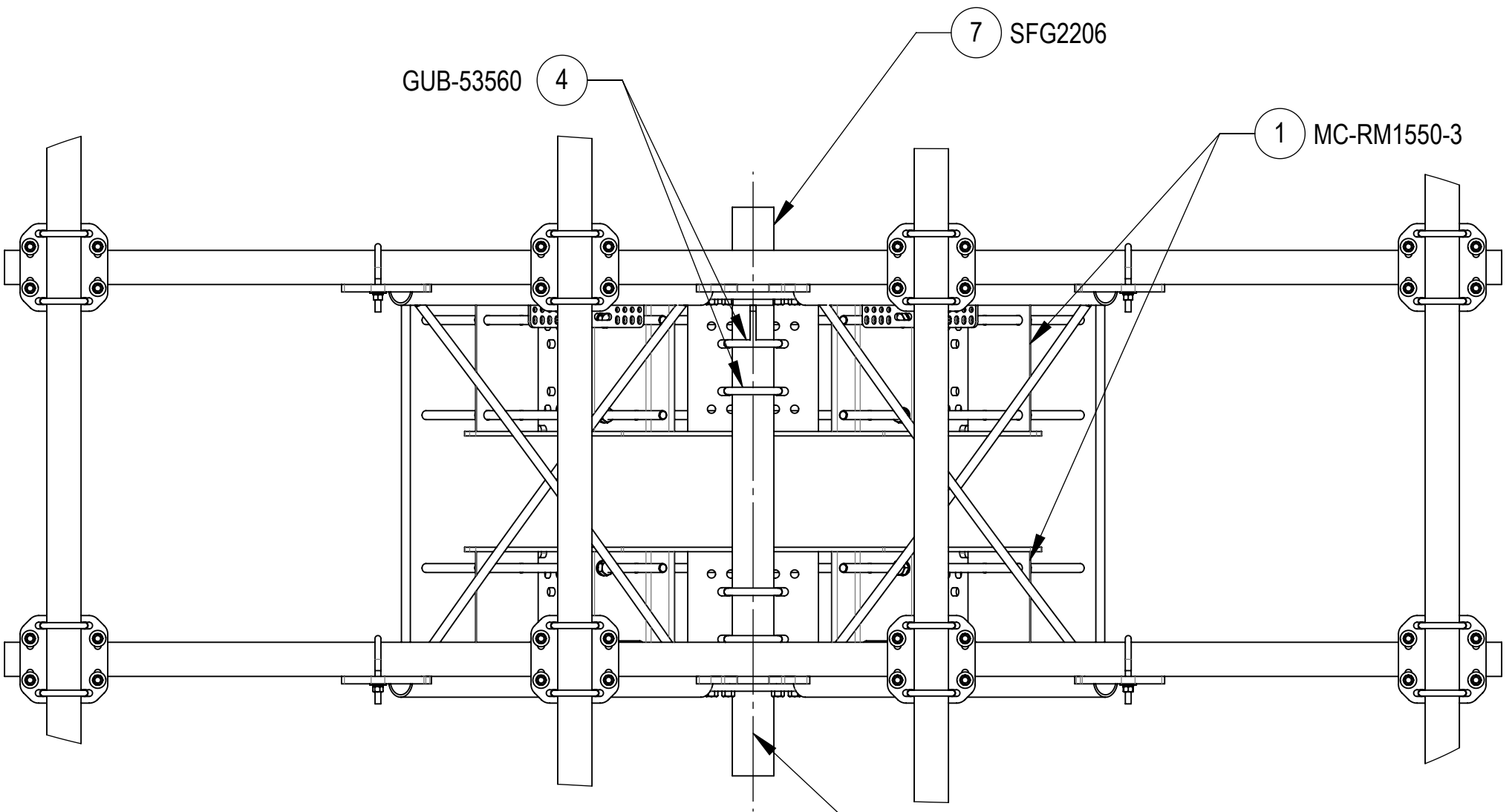
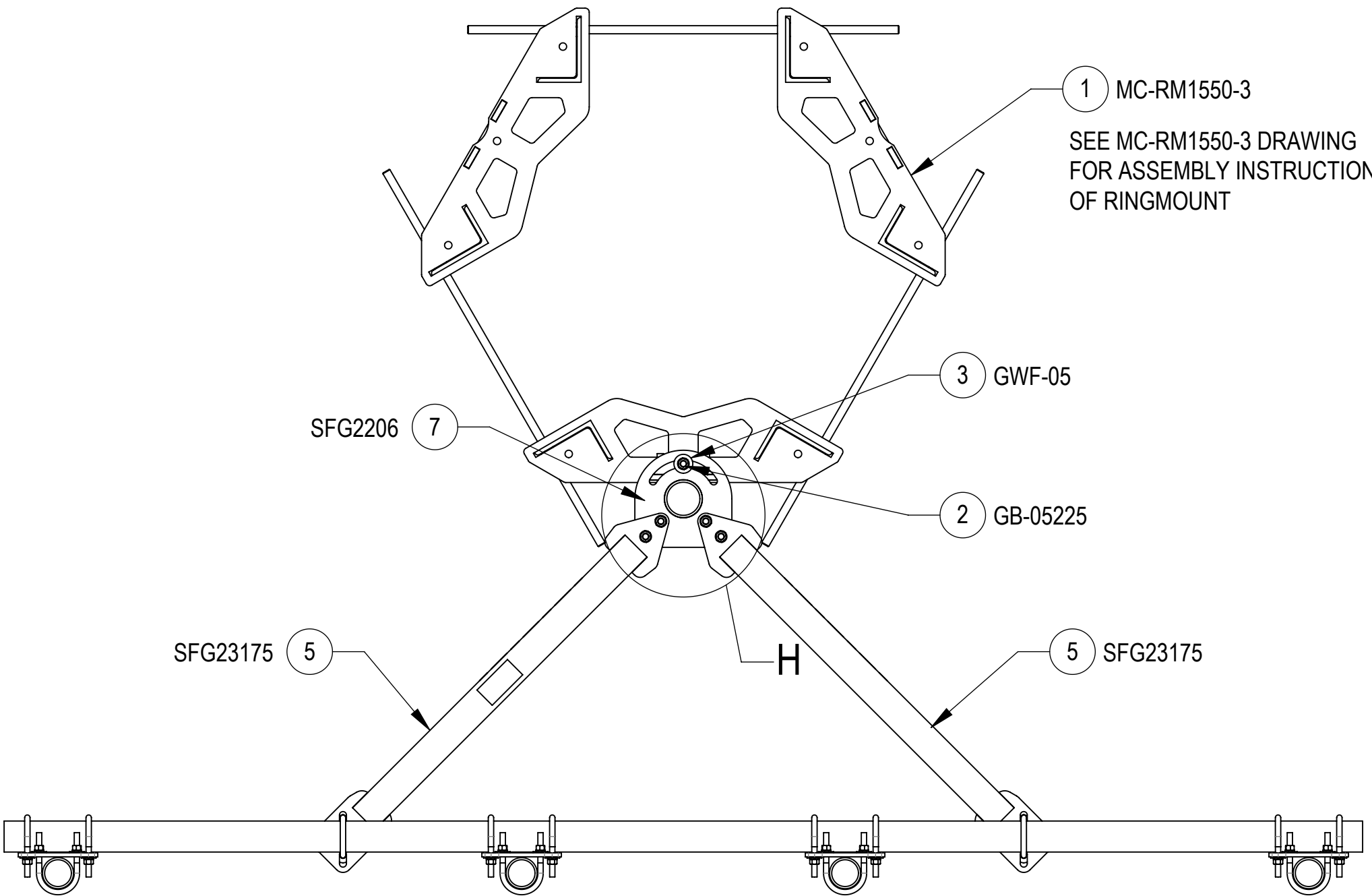


DETAIL G
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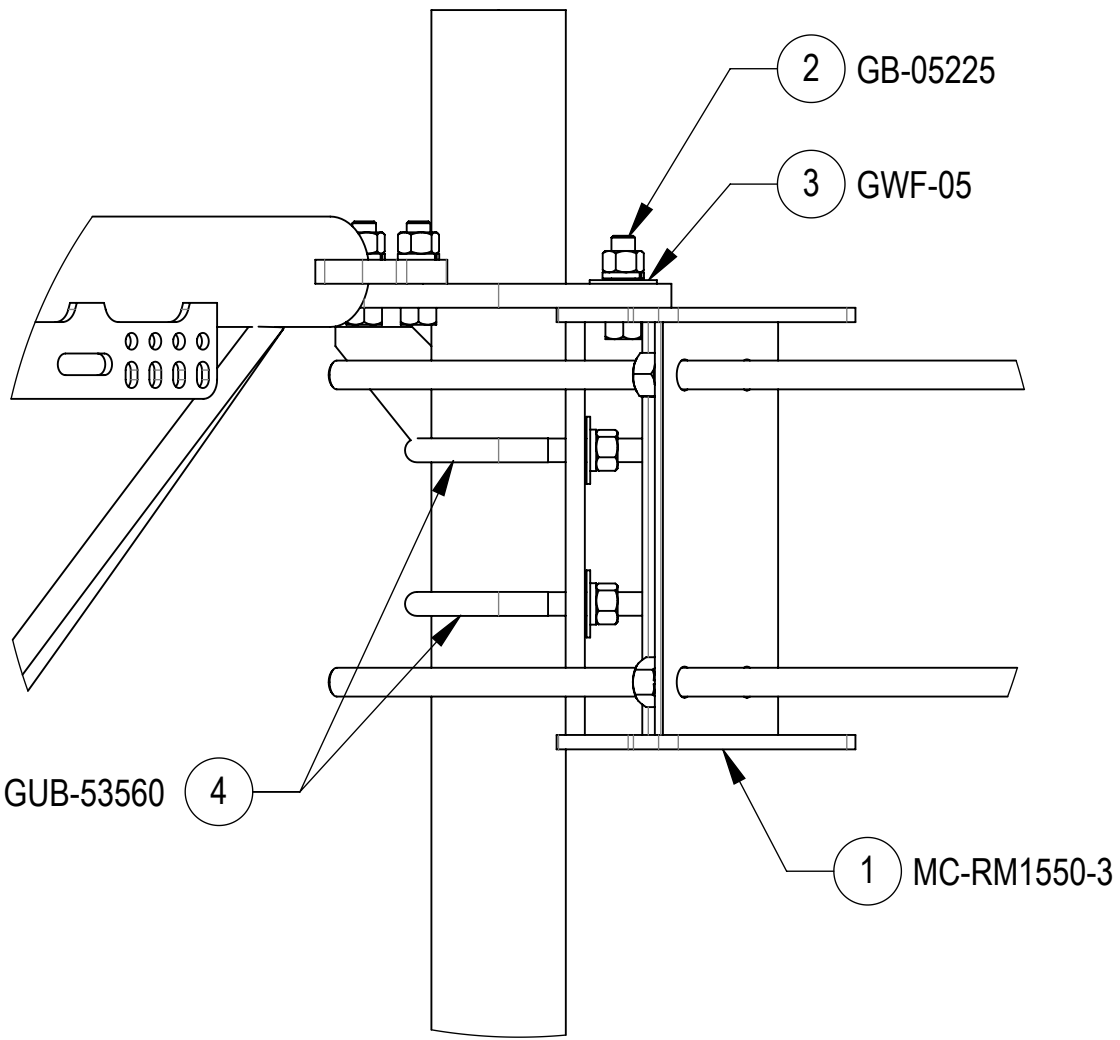
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BOTTOM

				
TITLE MCG23HDX SECTOR FRAME SERIES				
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		VERSION 03	STATUS RE	REVISION D
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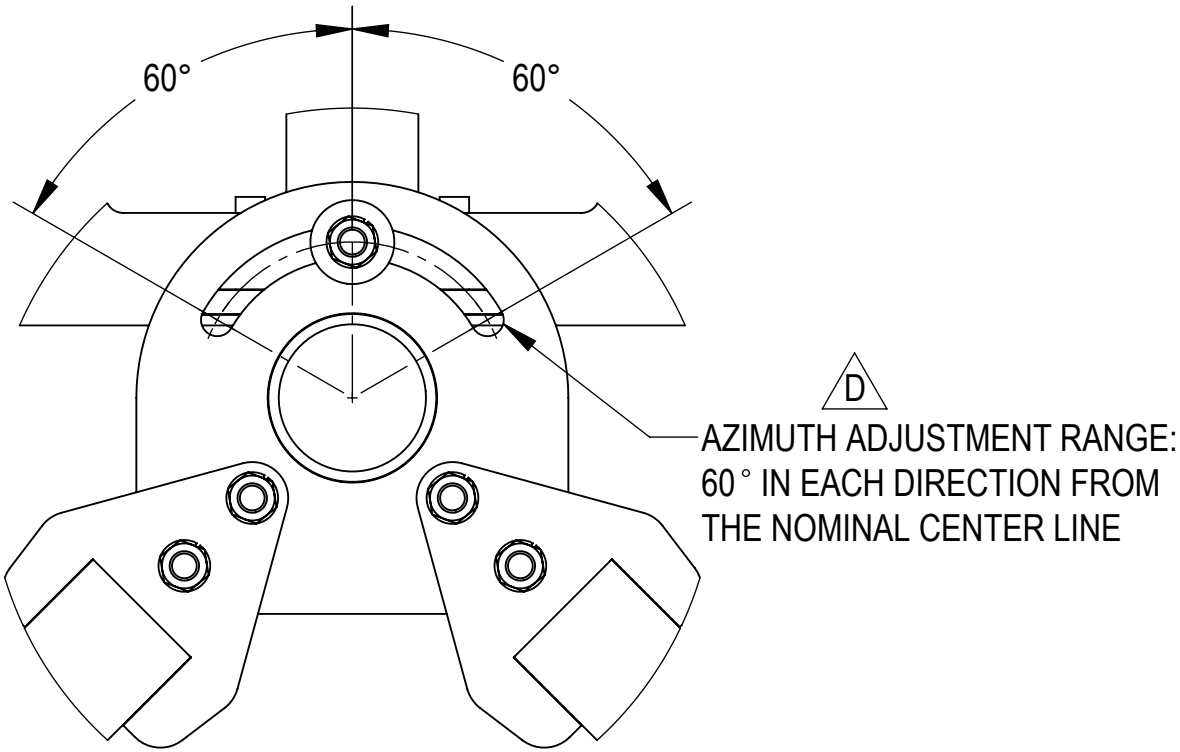
STEP 3: ATTACH BACK VERTICAL ARM MOUNT (SFG2206) TO RINGMOUNT (MC-RM1550-3) USING BOLT KIT (GB-05225), FLAT WASHER (GWF-05) AND U-BOLT (GUB-53560).



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



SIDE CROP VIEW

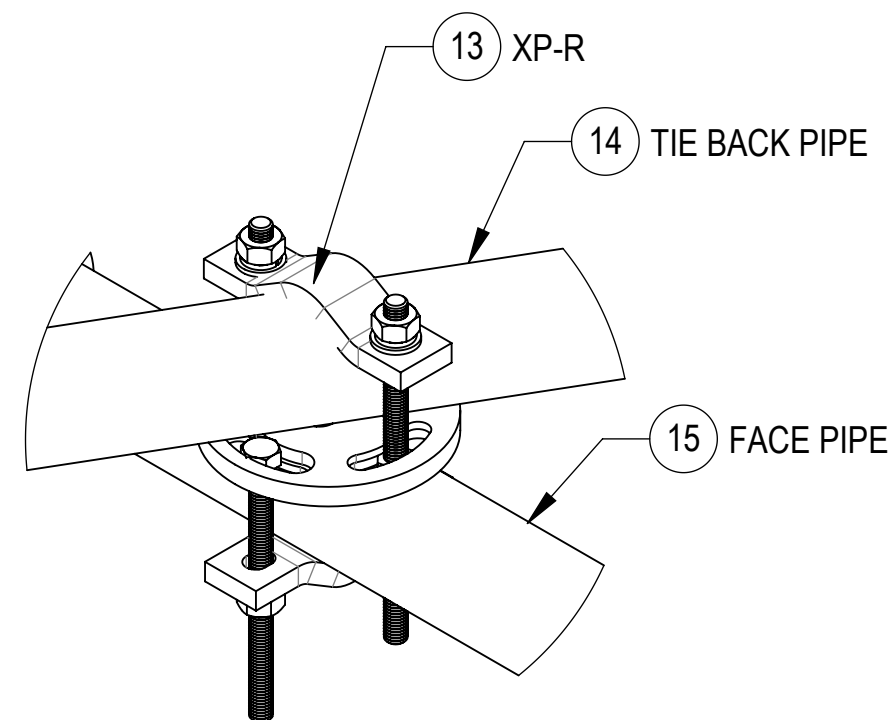
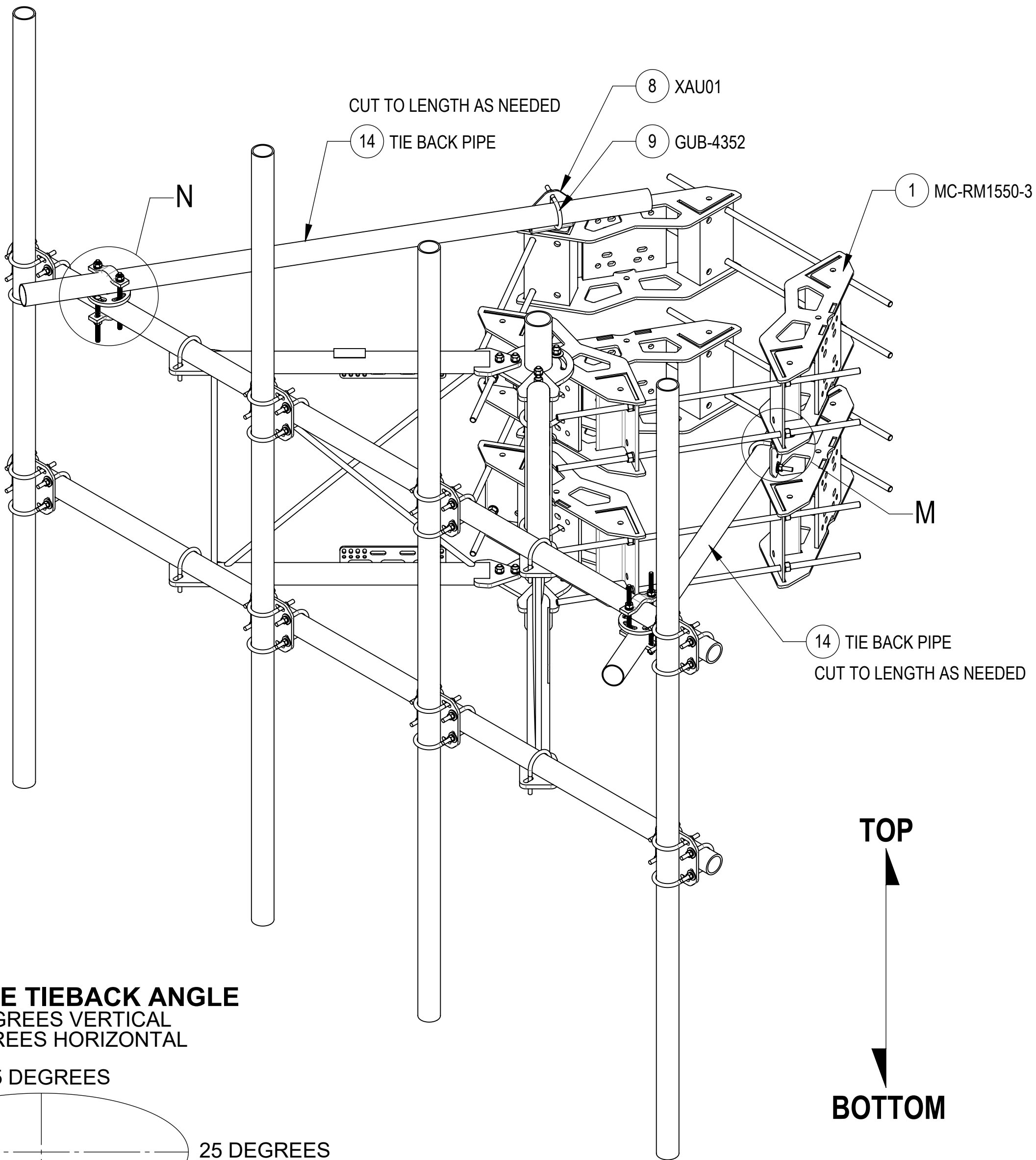


DETAIL H
SCALE 1 : 4

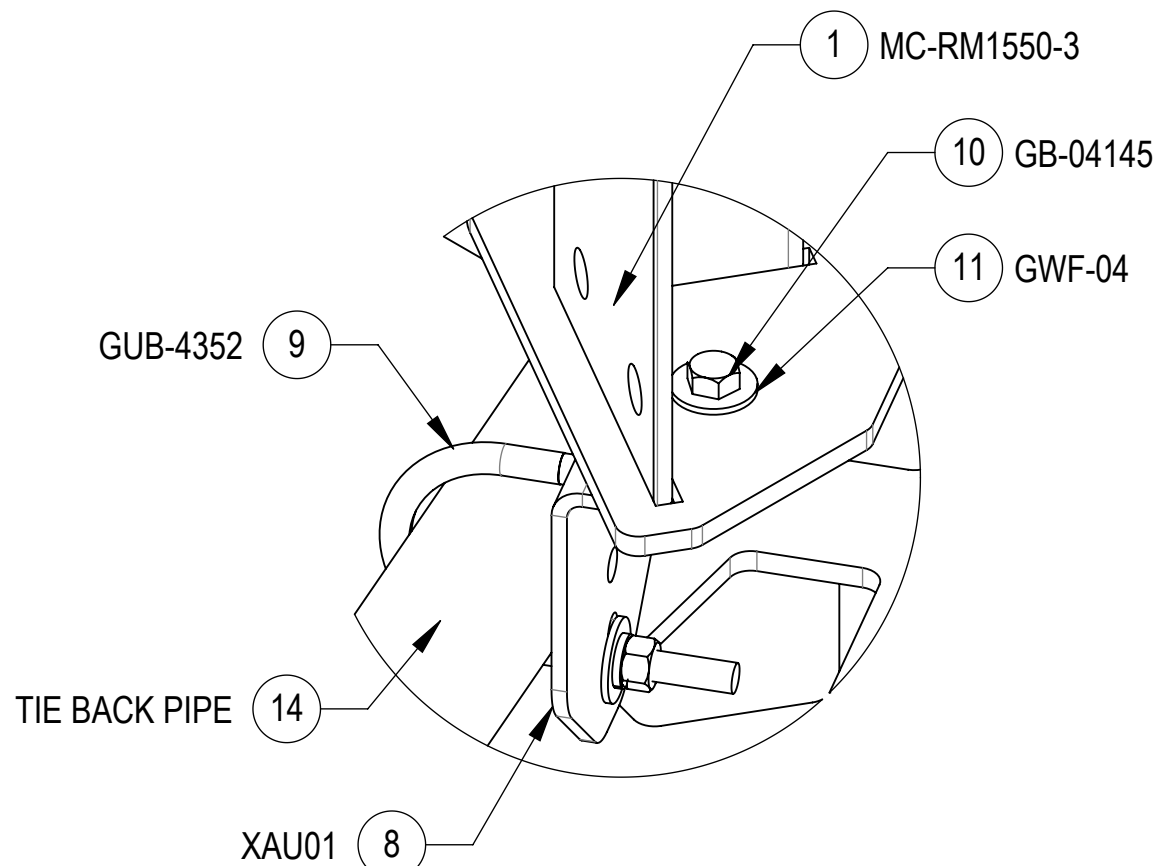
				
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SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX		
 		DRAWING		
		VERSION 03	STATUS RE	REVISION D
Confidential		SHEET 8 OF 10		

STEP 4: ATTACH TIE BACK PIPES TO FACE PIPES USING ROUND CROSSOVER PLATE KITS (XP-R).

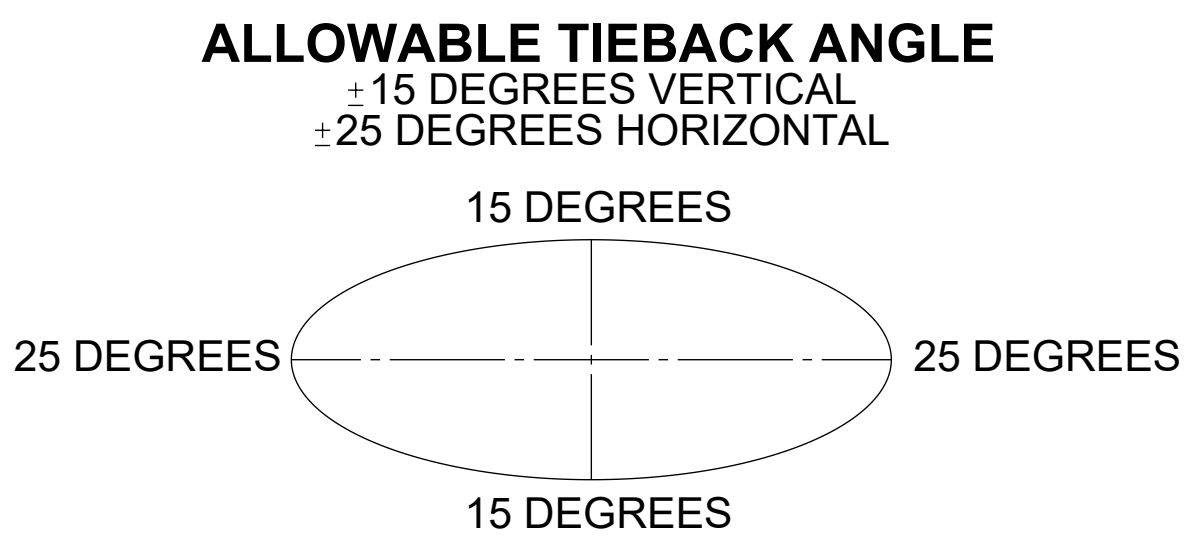
STEP 5: ATTACH TIE BACK PIPES TO RINGMOUNT (MC-RM1550-3) USING CROSSOVER ANGLES (XAU01), BOLT KITS (GB-04145), FLAT WASHERS (GWF-04) AND U-BOLTS (GUB-4352).



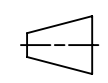
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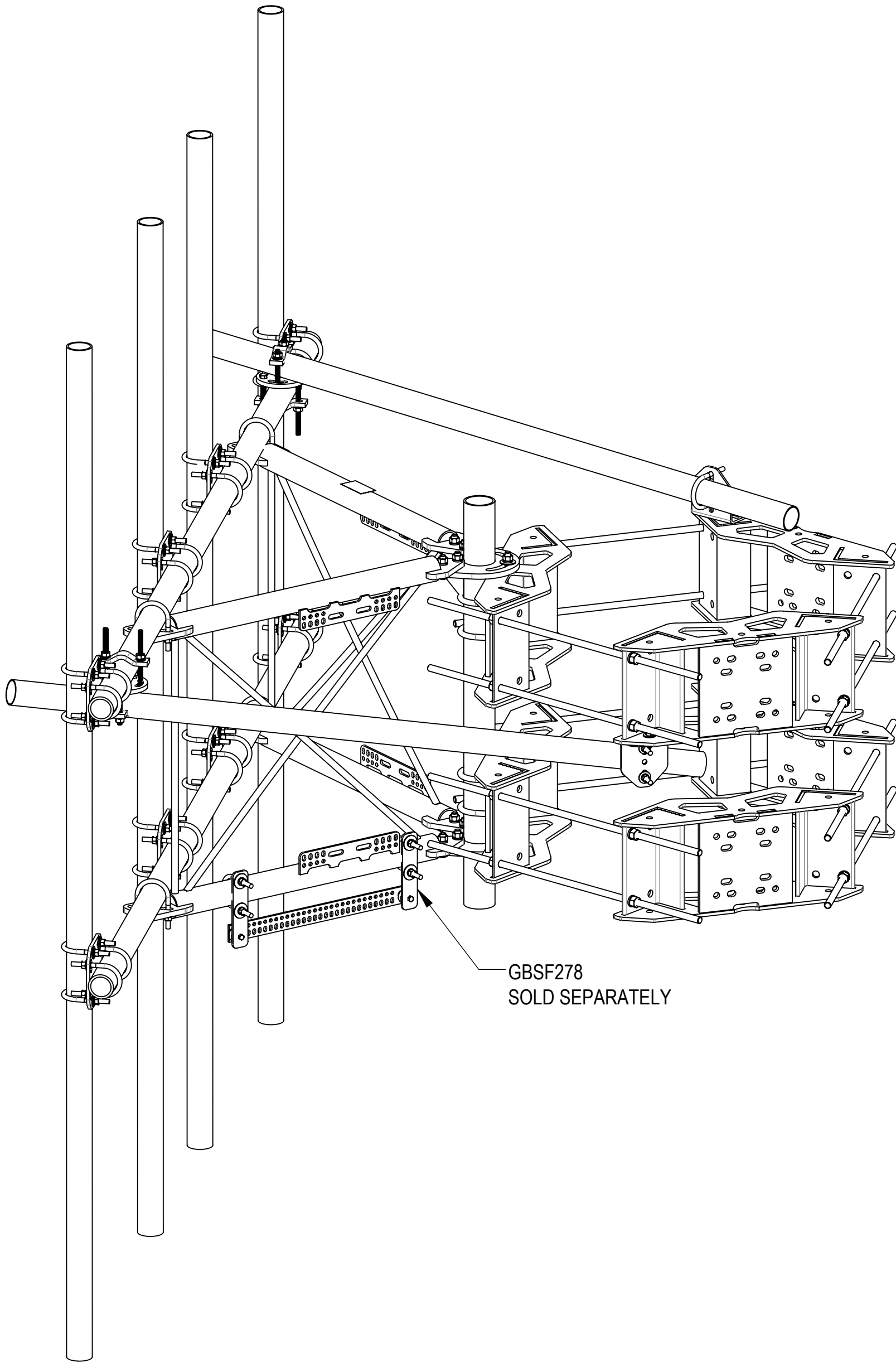
DETAIL M
SCALE 1 : 3



ISO VIEW

				
TITLE MCG23HDX SECTOR FRAME SERIES				
SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX		
 		DRAWING		
		VERSION 03	STATUS RE	REVISION D
Confidential		SHEET 9 OF 10		

OPTIONAL ACCESSORIES:



TITLE
MCG23HDX SECTOR FRAME SERIES

SIZE C	SCALE 1:32	DOCUMENT NO. MCG23HDX
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DRAWING			SHEET 10 OF 10
VERSION	STATUS	REVISION	
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