

# STRUCTURAL SUPPORT PRODUCTS

PRODUCT SELECTION GUIDE



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### STRUCTURAL SUPPORT SOLUTIONS

ANDREW® provides Structural Support Solutions that deliver stability, durability, and precision for the most important networks in the world. Our premium Structural Support Solutions reinforce your structure and optimize antenna performance. As a result, these solutions help you realize significant, long-term OpEx savings.

Our support systems are suited to be used on virtually any kind of tower, monopole, roof top structure or water tower. Each solution is engineered to meet or exceed the latest EIA/TIA code requirements and conform to both ISO-9001 standards and AISC specifications. This proven excellence enables network operators to:

- · Minimize or eliminate antenna misalignment
- · Utilize available spectrum more efficiently
- · Improve RF path integrity and overall network performance
- Increase throughput and quality of service
- Mitigate customer churn and total cost of ownership

Because our components are engineered and manufactured to the highest standards and most exact specifications, you can rest assured they've been designed to fit snugly on your tower and fabricated to withstand the harshest elements. Whether you need additional U-bolts for your mount, or struts and brackets for your microwave, pipe or stand-off mounts, we deliver the most durable mounting components to keep your antenna properly aligned.

## **RESOURCES**

Where to buy

Key ANDREW locations

Product nomenclature





## **SERVICED BY**









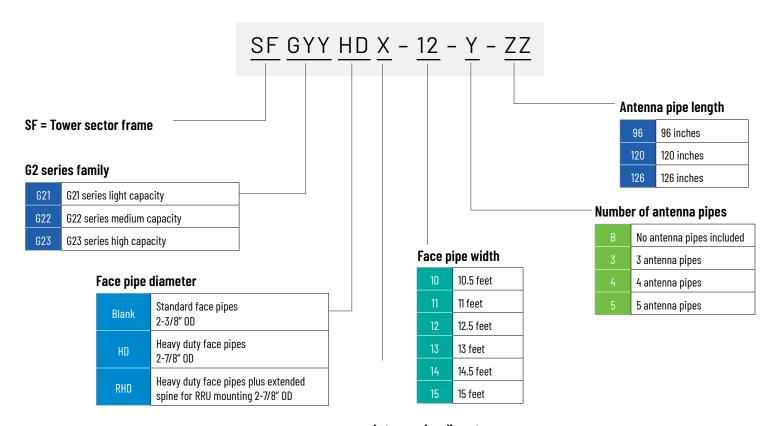




For product support questions, email us directly at: steelproducts@andrew.com

### PART NUMBER NOMENCLATURE

#### **G2 SERIES TOWER SECTOR FRAME**

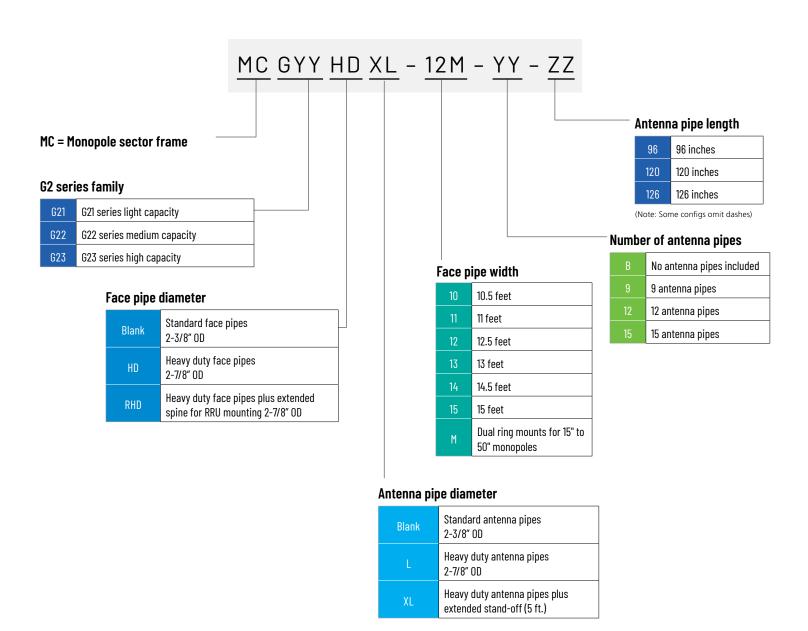


#### Antenna pipe diameter

Blank	Standard antenna pipes 2-3/8″ OD
Х	Heavy duty antenna pipes 2-7/8" OD
XL	Heavy duty antenna pipes plus extended stand-off (5 ft.)

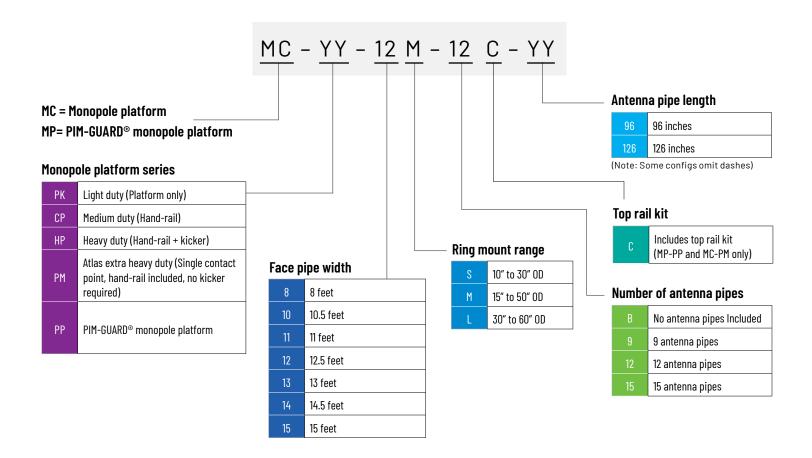
### PART NUMBER NOMENCLATURE

#### **G2 SERIES MONOPOLE SECTOR FRAME**



### PART NUMBER NOMENCLATURE

#### **MONOPOLE PLATFORMS**



## **PIM-GUARD® SOLUTIONS**

#### RHDXL SERIES:

SFG23RHDXL

MCG23RHDXL

#### RHDX SERIES:

SFG23RHDX

SFG22RHDX

MCG23RHDX

MCG22RHDX0

#### HDX SERIES:

SFG22HDX

MCG22HDX

MP-PP SERIES



#### SMARTER ENGINEERING FOR PIM-FREE TOWER TOPS

Passive intermodulation (PIM) presents a constant challenge to cellular network performance. ANDREW created new antenna mounting solutions that greatly reduce PIM arising between remote radio units (RRUs) and base station antennas (BSAs) on the tower—and the resulting PIM savings are a real game-changer, especially for higher-power radios.

#### **RHDX SPINE EXTENSION APEX RRU MOUNT** RHDXL PIM OPTIMIZED SECTOR FRAME • APEX mounts up to 8 Radios on RHDX • All the features and benefits of the RHDX & RHDXL spines to move radios away extended spine PLUS PIM optimized frame from antennas to increase antenna-to-antenna spacing **FEATURES CORE RRU SADDLE MOUNT** MP-PP PIM OPTIMIZED PLATFORM • Extended spine for SFG23 RHDX mounts that increase RRU mounting capabilities Decreased PIM from radio relocation · Increased versatility and stability • Updated frame provides higher loading • More RRU mounting available, reducing need for additional mounts · Better load management · Less structure stress · Available as tower & monopole sector PIM optimizedmonopole platform with frames adjustable single-point tower connection · CORE internal tower mount attaches to rear of RHDX and RHDXL Saddle that provides increased antenna spacing & · Can be used in combination with enables RRU mounting on custom triangle mounts APEX and CORE RRU mounts

### **PIM-GUARD® RHDXL TOWER SECTOR FRAMES**

#### **TOWER SECTOR FRAMES 62" STANDOFF - WITH SPINE**

- New RHDXL extended frame enables increased antenna-toantenna spacing
- Extended spine relocates radios & extended frame increases distance between antennas to combine forces & mitigate PIM in the hi-risk zone around antennas
- Tapered clamps up to 8" tower leg

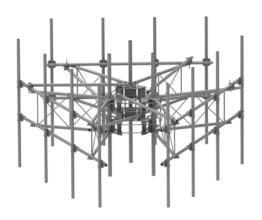


DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
RHDXL PIM optimized tower sector frame	None	SFG23RHDXL-11-B
Single sector	(3) 2-7/8" OD x 96" pipes	SFG23RHDXL11-3-96
11' face	(3) 2-7/8" OD x 126" pipes	SFG23RHDXL11-3-126
RHDXL PIM optimized tower sector frame	None	SFG23RHDXL-13-B
Single sector 13' face	(4) 2-7/8" OD x 96" pipes	SFG23RHDXL13-4-96
	(4) 2-7/8" OD x 126" pipes	SFG23RHDXL13-4-126
	None	SFG23RHDXL-15-B
RHDXL PIM optimized tower sector frame Single sector 15' face	(4) 2-7/8" OD x 96" pipes	SFG23RHDXL15-4-96
	(5) 2-7/8" OD x 96" pipes	SFG23RHDXL15-5-96
	(4) 2-7/8" OD x 126" pipes	SFG23RHDXL15-4-126
	(5) 2-7/8" OD x 126" pipes	SFG23RHDXL15-5-126

## **PIM-GUARD® RHDXL MONOPOLE SECTOR FRAMES**

#### **MONOPOLE SECTOR FRAMES 62" STANDOFF - WITH SPINE**

- New RHDXL extended frame enables increased antenna-toantenna spacing
- Extended spine relocates radios & extended frame increases distance between antennas to combine forces & mitigate PIM in the hi-risk zone around antennas
- Ring mount kit: 15" to 50" monopoles



DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
RHDXL PIM optimized monopole sector frame	None	MCG23RHDXL-11MB
Three sector	(9) 2-7/8"OD x 96" pipes	MCG23RHDXL-11M996
11' face	(9) 2-7/8" OD x 126" pipes	MCG23RHDXL-11M9126
RHDXL PIM optimized monopole sector frame	None	MCG23RHDXL-13MB
Three sector	(12) 2-7/8" OD x 96" pipes	MCG23RHDXL-13M1296
13' face	(12) 2-7/8" OD x 126" pipes	MCG23RHDXL13M12126
	None	MCG23RHDXL-15MB
RHDXL PIM optimized monopole sector frame	(12) 2-7/8" OD x 96" pipes	MCG23RHDXL-15M1296
Three sector	(12) 2-7/8" OD x 126" pipes	MCG23RHDXL15M12126
15' face	(15) 2-7/8" OD x 96" pipes	MCG23RHDXL-15M1596
	(15) 2-7/8" OD x 126" pipes	MCG23RHDXL15M15126

## **PIM-GUARD® RHDX TOWER SECTOR FRAMES**

#### **TOWER SECTOR FRAMES 42" STANDOFF - WITH SPINE**

- Extended Spine relocates radios to mitigate PIM in the Hi-risk zone around antennas
- Tapered clamps up to 8" tower leg

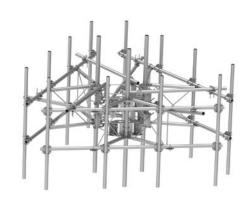


DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
G23 Series High Capacity Sector Frames (with extended spin	ne for RRU Mounting)	·
G23RHDX Tower Sector Frame	None	SFG23RHDX-11-B
Single Sector 11' Face	(3) 2-7/8" OD x 120" pipes	SFG23RHDX-11-3-120
G23RHDX Tower Sector Frame	None	SFG23RHDX-13-B
Single Sector 13' Face	(4) 2-7/8" OD x 120" pipes	SFG23RHDX-13-4-120
G23RHDX Tower Sector Frame	None	SFG23RHDX-15-B
Single Sector	(4) 2-7/8" OD x 120" pipes	SFG23RHDX-15-4-120
15' Face	(5) 2-7/8" OD x 120" pipes	SFG23RHDX-15-5-120
G22 Series Medium Capacity Sector Frames (with extended	spine for RRU Mounting)	
G22RHDX Tower Sector Frame Single Sector 11' Face	None	SFG22RHDX-11-B
G22RHDX Tower Sector Frame	None	SFG22RHDX-13-B
Single Sector 13' Face	(4) 2-7/8" OD x 120" pipes	SFG22RHDX-13-4-120
G22RHDX Tower Sector Frame	None	SFG22RHDX-15-B
Single Sector	(4) 2-7/8" OD x 120" pipes	SFG22RHDX-15-4-120
15' Face	(5) 2-7/8" OD x 120" pipes	SFG22RHDX-15-5-120

## **PIM-GUARD® RHDX MONOPOLE SECTOR FRAMES**

#### MONOPOLE SECTOR FRAMES 42" STANDOFF - WITH SPINE

- Extended spine relocates radios to mitgate PIM in the Hi-risk zone around antennas
- Ring mount kit: 15" to 50" monopoles

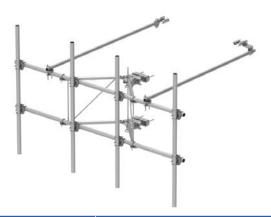


DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER	
G23 Series High Capacity Sector Frames (with extended s	G23 Series High Capacity Sector Frames (with extended spine for RRU Mounting)		
G23RHDX Monopole Sector Frame Three Sector 13' Face	None	MCG23RHDX-13MB	
G23RHDX Monopole Sector Frame	None	MCG23RHDX-15MB	
Three Sector	(12) 2-7/8" OD x 120" pipes	MCG23RHDX-15M12120	
15' Face	(15) 2-7/8" OD x 120" pipes	MCG23RHDX-15M15120	
G22 Series Medium Capacity Sector Frames (with extende	d spine for RRU Mounting)		
G22RHDX Monopole Sector Frame Three Sector 11' Face	(9) 2-7/8" OD x 120" pipes	MCG22RHDX-11M9120	
G22RHDX Monopole Sector Frame	None	MCG22RHDX-13MB	
Three Sector 13' Face	(12) 2-7/8" OD x 120" pipes	MCG22RHDX-13M12120	
G22RHDX Monopole Sector Frame	None	MCG22RHDX-15MB	
Three Sector 15' Face	(12) 2-7/8" OD x 120" pipes	MCG22RHDX-15M12120	
	(15) 2-7/8" OD x 120" pipes	MCG22RHDX-15M15120	

## **PIM-GUARD® HDX TOWER SECTOR FRAMES**

#### **TOWER SECTOR FRAMES 42" STANDOFF - NO SPINE**

• Tapered clamps up to 8" tower leg



DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
G22HDX Tower Sector Frame	None	SFG22HDX-11-B
Single Sector 11' Face	(3) 2-7/8" OD x 120" pipes	SFG22HDX-11-3-120
G22HDX Tower Sector Frame	None	SFG22HDX-13-B
Single Sector 13' Face	(4) 2-7/8" OD x 120" pipes	SFG22HDX-13-4-H10
G22HDX Tower Sector Frame	None	SFG22HDX-15-B
Single Sector 15' Face	(4) 2-7/8" OD x 120" pipes	SFG22HDX-15-4-H10
	(5) 2-7/8" OD x 120" pipes	SFG22HDX-15-5-WLL

## **PIM-GUARD® HDX MONOPOLE SECTOR FRAMES**

#### MONOPOLE SECTOR FRAMES 42" STANDOFF - NO SPINE

• Ring mount kit: 15" to 50" monopoles



DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
G22HDX Monopole Sector Frame	None	MCG22HDX-11M-B
Three Sector 11' Face	(9) 2-7/8" OD x 120" pipes	MCG22HDX-11-9-120
G22HDX Monopole Sector Frame	None	MCG22HDX-13M-B
Three Sector 13' Face	(12) 2-7/8" OD x 120" pipes	MCG22HDX13-12-H10
G22HDX Monopole Sector Frame	None	MCG22HDX-15M-B
Three Sector 15' Face	(12) 2-7/8" OD x 120" pipes	MCG22HDX15-12-H10
	(15) 2-7/8" OD x 120" pipes	MCG22HDX15-15-WLL

### **MP-PP MONOPOLE PLATFORMS**

- PIM Optimized Monopole Platform with wider face enables increased antenna-to-antenna spacing and includes an innovative 'mini-kicker' with single point monopole attachment
- Innovative new Adjustable Triangle design enables RRU Mounting to relocate radios away from antennas & ensure spacing between adjacent sectors is fixed regardless of monopole diameter
- Ring mount kit:

Three Sector: 12" to 45" monopoles Four Sector: 15" to 45" monopoles





DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER
MP-PP Monopole Platform - Three	Sector	
MP-PP Monopole Platform	None	MP-PP13M-B
Three Sector	(12) 2-7/8" OD x 96" pipes	MP-PP13M-12C-96
13' Face	(12) 2-7/8" OD x 126" pipes	MP-PP13M-12C-126
	None	MP-PP15M-B
MP-PP Monopole Platform	(12) 2-7/8" OD x 96" pipes	MP-PP15M-12C-96
Three Sector	(12) 2-7/8" OD x 126" pipes	MP-PP15M-12C-126
15' Face	(15) 2-7/8" OD x 96" pipes	MP-PP15M-15C-96
	(15) 2-7/8" OD x 126" pipes	MP-PP15M-15C-126
MP-PP Monopole Platform - Four S	Sector	
MP-PP Monopole Platform	None	MP-PP13M4-B
Four Sector	(12) 2-7/8" OD x 120" pipes	MP-PP13M4-12C-120
13' Face	(16) 2-7/8" OD x 120" pipes	MP-PP13M4-16C-120
MP-PP Monopole Platform	None	MP-PP15M4-B
Four Sector	(16) 2-7/8" OD x 120" pipes	MP-PP15M4-16C-120
15' Face	(20) 2-7/8" OD x 120" pipes	MP-PP15M4-20C-120

### PIM-GUARD® SKEW FIGHTER

- Adjust out to 48"
- Supports up to 20 degrees of skew adjustment
- Infinitely adjustable between 0 and 48" of standoff



DESCRIPTION	PART NUMBER
PIM-GUARD Skew Fighter 10-20 degree	860678540
PIM-GUARD Skew Fighter Tie back kit	SKA-TBK

### PIM-GUARD® OFFSET CROSSOVER PLATE

- · Allows for current mounts to upgraded to accommodate new antenna spacing standards
- · Allow obstruction to be avoided
- Allows antenna pipes to be extended past the end of the mount (to achieve spacing standard)
- Accommodates 2-7/8" to 2-7/8" out of the box. Can support 2-3/8" pipes with additional U-bolts
- Each kit supports (1) antenna pipe
- Includes top and bottom plates
- Can be used in center or at ends of mount



DESCRIPTION	PART NUMBER
PIM-GUARD Offset Crossover Plate	XP-2525-0FF-2

## **RADIO MOUNTS**

DESCRIPTION	PART NUMBER
APEX Radio Mounts - RRH mount, 4 radios	
Mounts to 3.5" Round Members	RR-APEX4
Designed for G2RHDX Frames with Extended Spine	RR-APEX4-E
Back to Back Dual Radio Mounts	
Fast Access; round legs up to 5-5/8" OD, 90° angle up to 4-1/2"	RR-FA2
Fast Access RRU Mount Kit for Back-to-Back (B2B) Mounting of (2) RRUs to Round, Straight or Tapered members. With interface plate	RR-FA2-A
PIM-GUARD dual radio mount with lift for Ericsson Radios	RR-FA4
Interface Plate Radio Mount interface plate to enable Ericsson radios to attach to standard radio mounts	860677769-001
RRU Mount Upgrade Kit for Mounting of (2) additional RRUs on RR-FA4 or RR-APEX4-E RRU Mounts	RR-FA4-AMK-001



APEX Radio Mount (RR-APEX4)





Fast Access Radio Mount (RR-FA2)





RRU Mount, Ericsson (RR-FA4)



#### POLYMER PIM-GUARD® ANTENNA AND RRU CABLE SUPPORT BRACKETS

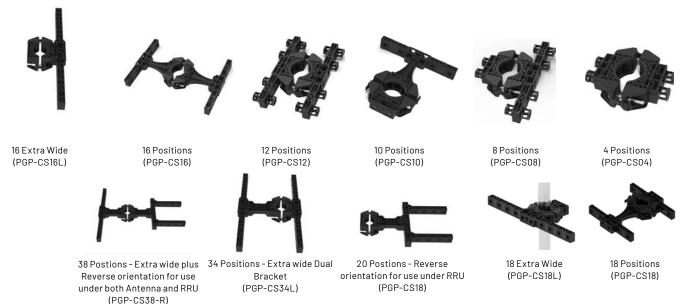
ANDREW was the first to develop the industry's first all-resin, PIM-GUARD® Antenna & Radio Cable Support brackets to provide PIM-fighting interference protection in the high-risk zone around the antenna. Recyclable, lightweight and weatherproof, these "PIM-Fighter" brackets were designed to work with our PIM-GUARD SnapTak hangers, enabling higher cable densities and leaving PIM nowhere to hide!

#### **FEATURES**

- Port counts from 4- to 38-ports plus stackable SnapTak® hangers to support evolving needs
- New 22-inch wide and reverse orientation options for expanded applications
- Part of an end-to-end PIM-GUARD® strategy for flexible network growth

DESCRIPTION	CABLE RUNS QUANTITY	3/4" HOLE QUANTITY	PART NUMBER			
Polymer PIM-GUARD® Antenna and RRU Cable Support Brackets Number of positions for stackale hangers (up to 2 per position) Round member mounting; 2.4"-3.0"						
38 Postions - Extra wide plus Reverse orientation for use under both Antenna and RRU	38	38	PGP-CS38-R			
34 Positions - Extra wide Dual Bracket	34	34	PGP-CS34L			
20 Postions - Reverse orientation for use under RRU	20	20	PGP-CS20-R			
18 Positions - Extra wide Bracket	18	18	PGP-CS18L			
18 Positions	18	18	PGP-CS18			
16 Positions - Extra wide Bracket	16	16	PGP-CS16L			
16 Positions	16	16	PGP-CS16			
12 Positions	12	12	PGP-CS12			
10 Positions	10	10	PGP-CS10			
8 Positions	8	8	PGP-CS08			
4 Positions	4	4	PGP-CS04			

NOTE: Also Available in Kits of 6 and 12



## **HEAVY DUTY ROOF FRAMES**

DESCRIPTION	ANTENNA PIPES INCLUDED	PART NUMBER				
Heavy Duty Non-penetrating Roof Frames						
RT Series Rooftop Sector Frame	None	RT-NF11-B				
Single Sector 11′ Face	(3) 2-7/8" OD x 120" pipes	RT-NF11-3-120				
RT Series Rooftop Sector Frame Single Sector 13' Face	None	RT-NF13-B				
	(4) 2-7/8" OD x 120" pipes	RT-NF13-4-120				
RT Series Rooftop Dual Sector Frame	None	RT-DF15-B				
Single Sector	(4) 2-7/8" OD x 120" pipes	RT-DF15-4-120				
15' Face	(5) 2-7/8" OD x 120" pipes	RT-DF15-5-120				
RRU Mount Kit for Non-Penetrating Roof Frames						
RRU Mount Kit Includes (4) Unistruts for Mounting		RT-NFR4				



Heavy Duty Non-Penetrating Roof Frame



RRU Mount Kit for Non-Penetrating Roof Frame

### **MONOPOLE APPLICATIONS**

Atlas monopole platform

MCG23RHDX monopole sector frames

MCG23HDX monopole sector frames

MCG22HD monopole sector frames

MC-HP 3-sector high capacity monopole platform

MC-CP 3-sector medium capacity monopole platform

MC-PK 3-sector low profile monopole platform

Double T-arms kits

4-sector Atlas MC-PM series high-capacity platform kits

6-sector monopole platforms kits

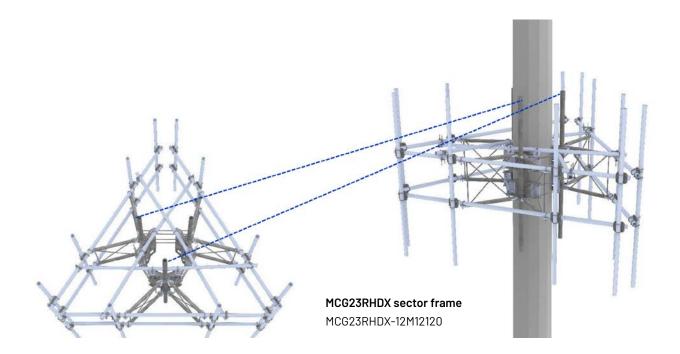


### MCG23RHDX MONOPOLE SECTOR FRAMES

The Heavy Duty G23RHDX Series features an extended 10-foot spine design that provides radio mounting locations farther away from antennas—which not only reduces PIM by distancing radios from the antenna near field but also increases mount stability and reduces the potential for vibration-induced PIM.

- Decreased PIM from radio relocation
- · Increased versatility and stability
- Better load management
- Decreased antenna pipe loading

- Use with the RR-APEX4 RRU mount for up to 4 radios.
- 42" stand-off with spine

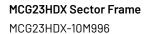


DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
MCG23RHDX Spine Series (RRU Relocation Heavy Duty Xtreme High Capacity Sector Frame) —Meets TIA 5053 standard							
	10' face width	(9) 2-7/8" OD X 120" Antenna Pipe	MCG23RHDX-10M9120				
	io race width	(9) 2-7/8" OD X 96" Antenna Pipe					
	12' face width	(12) 2-7/8" OD X 120" Antenna Pipe	MCG23RHDX-12M12120				
RRU Relocation Heavy Duty Xtreme Heavy Capacity Sector Frame	iz race width	(12) 2-7/8" OD X 96" Antenna Pipe	MCG23RHDX-10M996 MCG23RHDX-12M12120 MCG23RHDX-12M1296 MCG23RHDX-14M12120 MCG23RHDX-14M1296				
NNO Nelocation heavy buty Attente heavy capacity sector frame		(12) 2-7/8" OD X 120" Antenna Pipe	MCG23RHDX-14M12120				
	14' face width	(12) 2-7/8" OD X 96" Antenna Pipe	MCG23RHDX-14M1296				
	14 Tace wiutii	(15) 2-7/8" OD X 120" Antenna Pipe	MCG23RHDX-14M15120				
		(15) 2-7/8" OD X 96" Antenna Pipe	MCG23RHDX-14M1596				

### MCG23HDX MONOPOLE SECTOR FRAMES

G23 Series Monopole & Tower Sector Frames feature our highest capacity sector frame option when heavy duty load conditions are required. Offerings include 10ft, 12ft, and 14ft face widths with up to 5 antenna pipes per sector and feature double tie-backs. The G23 Family includes:

- MCG23HDX: Monopole Sector Frames with 2-7/8" OD Face Pipes & Antenna Pipes
- SFG23HDX: Tower Sector Frames with 2-7/8" OD Face Pipes & Antenna Pipes





DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
MCG23HDX Series (Heavy Duty Xtreme High Capacity Sector Frame)—Meets TIA 5053 standard							
		(9) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-10M996				
	10' Face Width	(9) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-10M9120				
	TO Tace Width	(12) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-10M1296				
		(12) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-10M12120				
	(9) 2-7/8" OD X 96" Antenna Pipe  (9) 2-7/8" OD X 120" Antenna Pipe  (12) 2-7/8" OD X 96" Antenna Pipe  (12) 2-7/8" OD X 120" Antenna Pipe	(9) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-12M996				
Hoovy Duty Vtromo High Consoity Coster Frame		(9) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-12M9120				
Heavy Duty Xtreme High Capacity Sector Frame		(12) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-12M1296				
		(12) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-12M12120				
		(12) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-14M1296				
	(12) 2-7/8" OD X 120" Antenna Pipe	(12) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-14M12120				
	14' Face Width	(15) 2-7/8" OD X 96" Antenna Pipe	MCG23HDX-14M1596				
		(15) 2-7/8" OD X 120" Antenna Pipe	MCG23HDX-14M15120				

## **MCG22HD MONOPOLE SECTOR FRAMES**

G22 Series Monopole & Tower Sector Frames feature a medium duty sector frame option for a tailored solution when heavy duty load conditions are not required. Offerings include 10ft, 12ft, and 14ft face widths and feature double tie-backs.

> MCG22HD Sector Frame MCG22HD-12M-12-96



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER			
MCG22HD Series (Heavy Duty High Capacity 3-Sector Monopole Frame)—Meets TIA 5053 standard						
Heavy Duty Capacity 3-Sector Monopole Frame	10' Face Width	(9) 2-3/8"OD X 126" Antenna Pipe	MCG22HD-10M-9-126			
	10 Tace Willin	(9) 2-3/8"OD X 96" Antenna Pipe	MCG22HD-10M-9-96			
	12' Face Width	(12) 2-3/8"OD X 126" Antenna Pipe	MCG22HD-12M-12-126			
	iz race width	(12) 2-3/8″OD X 96″ Antenna Pipe	MCG22HD-12M-12-96			

DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER		
MCG22HDX Series (Heavy Duty Xtreme Capacity Frame 3-Sector Monopole Frame)—Meets TIA 5053 standard					
	12' Face Width	(12) 2-7/8″OD X 96″ Antenna Pipe	MCG22HDX-12M12-96		
Hoovy Duty Vtroma Canacity 3-Sector Managala Frama	12 race width	(12) 2-7/8"OD X 126" Antenna Pipe	MCG22HDX-12M12-126		
Heavy Duty Xtreme Capacity 3-Sector Monopole Frame	14' Face Width	(12) 2-7/8″OD X 96″ Antenna Pipe	MCG22HDX-14M12-96		
	14 race Width	(12) 2-7/8″OD X 126″ Antenna Pipe	MCG22HDX-14M12-126		

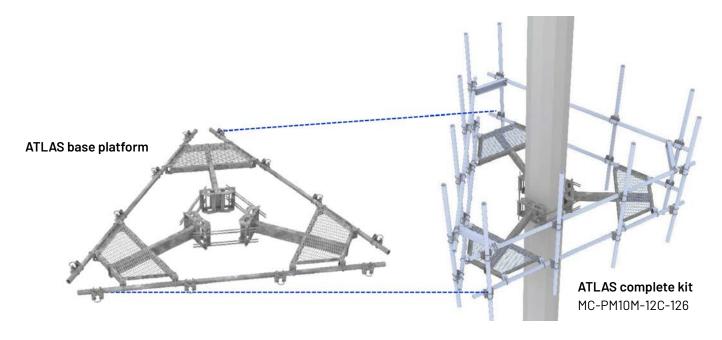
#### ATLAS MONOPOLE PLATFORM

#### ATLAS: STRONG ENOUGH TO CARRY YOU INTO THE FUTURE

ANDREW's innovative Atlas Monopole Platform solution provides the high-load capacity and performance that simplifies analysis, construction and installation, and ensures your tri-sector monopole deployment meets the latest TIA standards.

The design uses high-strength rectangular standoff tubes to create a heavy-duty standoff system. The simple design enables the use of commercially available software such as RISA-3D for fast and simple analysis.

Another feature of the mounting structure is the uniquely designed pivot brackets that replace the traditional clip angles. Typically, the old clip angles are made from bent steel plates whose structural integrity can be compromised by lateral wind loads. The new pivot brackets feature a thicker dual flange that compensates for the stress at the weak axis.

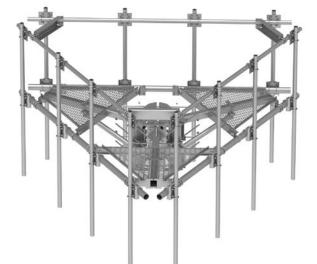


DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER	MOUNT RATING			
Atlas Ultra Heavy Loading (available on 12″-45″ dia mounting)—Meets TIA 5053 standard							
	10' face width	(12) 2-7/8" OD X 126" Antenna Pipe	MC-PM10M-12C-126	M2150R(1550)-4[6]			
	10 lace width	(12) 2-7/8" OD X 96" Antenna Pipe	MC-PM10M-12C-96	M2150R(1550)-4[6]			
Platform with Handrail and Antenna Pipes	12' face width	(12) 2-7/8" OD X 126" Antenna Pipe	MC-PM12M-12C-126	M2200R(1700)-4[6]			
riationii witti nanuran anu Antenna ripes		(12) 2-7/8" OD X 96" Antenna Pipe	MC-PM12M-12C-96	M2200R(1700)-4[6]			
	4//6	(12) 2-7/8" OD X 126" Antenna Pipe	MC-PM14M-12C-126	M2150R(1700)-4[6]			
	14' face width	(12) 2-7/8" OD X 96" Antenna Pipe	MC-PM14M-12C-96	M2150R(1700)-4[6]			

### MC-HP 3-SECTOR HIGH CAPACITY MONOPOLE PLATFORM

The MC-HP Series High Capacity Monopole Platforms feature a ring mount for monopoles ranging from 12" to 50" along with toprail and work platform for installers plus a kicker reinforcement kit for maximum loading. Offerings include 12ft, and 14ft face widths.

- Designed for 12" to 50" Monopoles
- Includes handrail, work platform, and kicker reinforcement kit
- Available as Base Kit or Full Kit with Antenna Pipes
- 3 Sector Solutions



#### MC-HP Series High Capacity Co-Location Platform Platform With Handrail and Kicker Kit

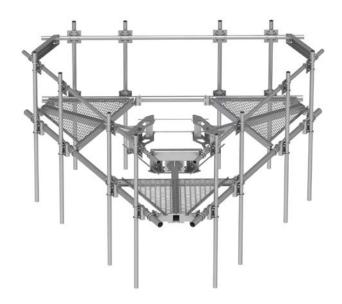
DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
Multi-Sector Monopole Platform—Meets TIA 5053 standard							
3-Sector High Capacity Monopole Platform - Includes platforn	n, toprail and kicker supports						
Platform Base, 12 in to 50 in OD (Pipe Ordered Separately)			MC-HP12M-B*				
Platform Kit with Handrail and Kicker, 12 in to 50 in 0D	12' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-HP12M-12-96				
Platform Kit with Handrail and Kicker, 12 in to 50 in 0D		(12) 2-3/8" OD X 126" Antenna Pipe	MC-HP12M-12-126				
Platform Base, 12 in to 50 in OD (Pipe Ordered Separately)		None	MC-HP14M-B*				
Platform Kit with Handrail and Kicker, 12 in to 50 in 0D	14' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-HP14M-12-96				
Platform Kit with Handrail and Kicker, 12 in to 50 in 0D		(12) 2-3/8" OD X 126" Antenna Pipe	MC-HP14M-12-126				

### MC-CP 3-SECTOR MEDIUM CAPACITY MONOPOLE PLATFORM

The MC-CP Series Medium Capacity Monopole Platforms feature a ring mount for monopoles ranging from 12" to 50" along with a toprail and work platform for installers. Offerings include 12ft, and 14ft face widths. This Monopole Platform Series does not include a support kicker.

- Designed for 12" to 50" Monopoles
- Includes both toprail and work platform
- Available as Base Kit or Full Kit with Antenna Pipes
- 3 Sector Solutions

MC-CP Series Medium Capacity Monopole Platform Co-Location Platform



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
Multi-Sector Monopole Platform—Meets TIA 5053 standard							
3-Sector Medium Capacity Monopole Platform Includes: Platform and toprail							
Platform Base with handrail, 12 in to 50 in OD (pipe ordered separately)		None	MC-CP12M-B*				
Platform with handrail, 12 in to 50 in OD	12' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-CP12M-12-96				
Platform with handrail, 12 in to 50 in OD		(12) 2-3/8" OD X 126" Antenna Pipe	MC-CP12M-12-126				
Platform Base with handrail, 12 in to 50 in OD (pipe ordered separately)		None	MC-CP14M-B*				
Platform with handrail, 12 in to 50 in OD	14' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-CP14M-12-96				
Platform with handrail, 12 in to 50 in OD		(12) 2-3/8" OD X 126" Antenna Pipe	MC-CP14M-12-126				

### MC-PK 3-SECTOR LOW PROFILE MONOPOLE PLATFORM

The MC-PK Series Light Capacity Monopole Platforms feature a ring mount for monopoles ranging from 12" to 50" along with a work platform for installers. Offerings include 8ft,10ft, 12ft, and 14ft face widths. This Monopole Platform Series does not include toprail or support kicker.

- Designed for 12" to 50" Monopoles
- Available as Base Kit or Full Kit with Antenna Pipes
- 3 Sector Solutions





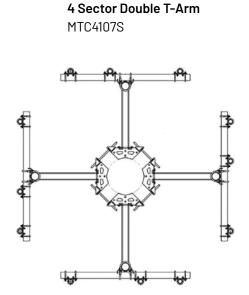
DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
Multi-Sector Monopole Platform—Meets TIA 5053 standard							
3-Sector Low-Profile Monopole Platform ONLY - toprail not included							
Platform with handrail, 15 in to 38 in OD	8' Face Width	(9) 2-3/8" OD X 72" Antenna Pipe	MC-PK8-C				
Platform with handrail, 15 in to 50 in 0D	10' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-PK10-C				
Platform Base Only, 12 in to 50 in OD (pipe ordered separately)		None	MC-PK12M-B*				
Platform, 12 in to 50 in 0D	12' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-PK12M-12-96				
Platform, 12 in to 50 in 0D		(12) 2-3/8" OD X 126" Antenna Pipe	MC-PK12M-12-126				
Platform Base Only, 12 in to 50 in OD (pipe ordered separately)		None	MC-PK14M-B*				
Platform, 12 in to 50 in 0D	14' Face Width	(12) 2-3/8" OD X 96" Antenna Pipe	MC-PK14M-12-96				
Platform, 12 in to 50 in 0D		(12) 2-3/8" OD X 126" Antenna Pipe	MC-PK14M-12-126				

### **DOUBLE T-ARMS KITS**

Heavy-duty double T-Arm mounts are designed for monopole applications and are ideal for Monopine and other concealment applications.

- The MTC41075 offers a four-sector version with up to 10-foot vertical stand-off
- The MC-KD offers Three-sectors and features sturdy corner tie-backs for added stability

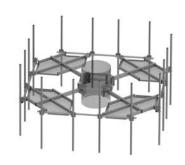
3 Sector Double T-Arm MC-KD14M-12-WLL



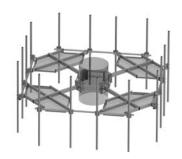
DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER
Double T-Arm Kits—Meets TIA 5053 standard			
4-Sector, azimuth adjustable faces for more compatibility	6' Face Width	(12) 2-3/8" OD x 96" Antenna Pipe	MTC4107S
3-Sector, Heavy duty with corner tie-backs, Includes (2) 12"-50" OD ringmounts	· 14' Face Width	(12) 2-7/8" OD x 120" Antenna Pipe	MC-KD14M-12-H10
3-Sector, Heavy duty with corner tie-backs, Includes (2) 15″-50″ OD ringmounts	IT I ace Width	(15) 2-7/8" OD x 120" Antenna Pipe	MC-KD14M-15-WLL

## 4-SECTOR ATLAS MC-PM SERIES—HIGH-CAPACITY PLATFORM KITS

MONOPOLE Diameter	TOP RAIL KIT	ANTENNA Pipes Included	CROSSOVERS INCLUDED	FACE PIPE LENGTH	FACE PIPE Diameter	ANTENNA Pipes Included	ANTENNA Pipe Diameter	PART NUMBER
15"-45"	NO	NO	NO	14'6"	2-7/8"	0	N/A	MC-PM14M4-B
15"-45"	NO	YES	YES	14'6"	2-7/8"	16	2-7/8"	MC-PM14M4-16-96
15"-45"	NO	YES	YES	14'6"	2-7/8"	16	2-7/8"	MC-PM14M4-16-126
15"-45"	NO	YES	YES	14'6"	2-7/8"	16	2-7/8"	MC-PM14M4-16-120
15"-45"	NO	NO	NO	12'6"	2-7/8"	0	N/A	MC-PM12M4-B
15"-45"	NO	YES	YES	12'6"	2-7/8"	16	2-7/8"	MC-PM12M4-16-96
15"-45"	NO	YES	YES	12'6"	2-7/8"	16	2-7/8"	MC-PM12M4-16-126
15"-45"	NO	YES	YES	12'6"	2-7/8"	16	2-7/8"	MC-PM12M4-16-120
15"-45"	NO	NO	NO	10'6"	2-7/8"	0	N/A	MC-PM10M4-B
15"-45"	NO	YES	YES	10'6"	2-7/8"	16	2-7/8"	MC-PM10M4-16-96
15"-45"	NO	YES	YES	10'6"	2-7/8"	16	2-7/8"	MC-PM10M4-16-126
15"-45"	NO	YES	YES	10'6"	2-7/8"	16	2-7/8"	MC-PM10M4-16-120



Atlas MC-PM Series—high-capacity platform kits (MC-PM10M4-16-96)



Atlas MC-PM Series—high-capacity platform kits (MC-PM12M4-16-96)



Atlas MC-PM Series—high-capacity platform kits (MC-PM14M4-B)

### 4-SECTOR MC-PK SERIES—BASE PLATFORM KITS

MONOPOLE Diameter	TOP RAIL KIT	ANTENNA Pipes Included	CROSSOVERS INCLUDED	FACE PIPE LENGTH	FACE PIPE Diameter	ANTENNA Pipes Included	ANTENNA Pipe Diameter	PART NUMBER
10″-30″	NO	NO	NO	14'6"	3-1/2"	0	N/A	MC-PK14S4-B
30"-60"	NO	NO	NO	14'6"	3-1/2"	0	N/A	MC-PK14L4-B
10"-30"	NO	NO	NO	12'6"	3-1/2"	0	N/A	MC-PK12S4-B
30"-60"	NO	NO	NO	12'6"	3-1/2"	0	N/A	MC-PK12L4-B
30"-60"	YES	YES	YES	12'6"	3-1/2"	12	2-3/8"	MC-PK12L4-12-96

### 4-SECTOR MCHD-PK SERIES—FULL PLATFORM KITS

MONOPOLE Diameter	TOP RAIL KIT	ANTENNA Pipes Included	CROSSOVERS INCLUDED	FACE PIPE LENGTH	FACE PIPE DIAMETER	ANTENNA Pipes Included	ANTENNA Pipe Diameter	PART NUMBER
10"-30"	YES	YES	YES	14'6"	3-1/2"	14	2-7/8"	MCHD-PK14S4-12-96
30"-60"	YES	YES	YES	14'6"	3-1/2"	14	2-7/8"	MCHD-PK14L4-12-96
10"-30"	YES	YES	YES	12'6"	3-1/2"	12	2-7/8"	MCHD-PK12S4-12-96
30"-60"	YES	YES	YES	12'6"	3-1/2"	12	2-7/8"	MCHD-PK12L4-12-96

### **CUSTOM MONOPOLE PLATFORMS - 4 SECTOR KIT**

DESCRIPTION	MONOPOLE Diameter	PIPES Included	PART NUMBER	NSTD RATING WITH 2 TIEBACKS			
Custom Monopole Platform - 4 Sector Kit							
12' 6" Face	10" to 30"	(16) 2.88" OD 96" Pipes	MTC3946HD	M900R(1150)-4[6]			



MCHD-PK Series-full platform kits (MCHD-PK14S4-12-96)



MC-PK Series-base platform kits (MC-PK12L4-12-96)



MC-PK Series-base platform kits (MC-PK14S4-B)

### **OPTIONAL FOUR-SECTOR PLATFORM ACCESSORY KITS**

SUITABLE FOR Platform Series	ANTENNA Pipe mount Size	ANTENNE PIPE MOUNT OTY	TOP RAIL Length	TOP RAIL Diameter	TOP RAIL KITS
MCHD	2-7/8"	12	12'6"	2-7/8"	MCHD-TR4-12
MCHD	2-7/8"	12	14′6″	2-7/8"	MCHD-TR4-14
MCPK / MCPM	N/A	0	10'6"	2-7/8"	MC4-HR25X-10-B
MCPK / MCPM	2-7/8"	16	10'6"	2-7/8"	MC4-HR25X-10-16
MCPK / MCPM	N/A	0	12'6"	2-7/8"	MC4-HR25X-12-B
MCPK / MCPM	2-7/8"	16	12'6"	2-7/8"	MC4-HR25X-12-16
MCPK / MCPM	N/A	0	14′6″	2-7/8"	MC4-HR25X-14-B
MCPK / MCPM	2-7/8"	16	14'6"	2-7/8"	MC4-HR25X-14-16



Optional four-sector platform accessory kits (MC4-HR25X-10-B)



Optional four-sector platform accessory kits (MCHD-TR4-12)

## **6-SECTOR MONOPOLE PLATFORMS KIT**

6-Sector Platform Kit High Capacity MTC3984



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
6-Sector Monopole Platform							
Base Platform with Kicker Kit. 12 in to 50 in OD	(3) 6' Face Width	(18) 2 3/8" OD x 96" Antenna Pipe	MTC3984				
Dase Flationii with Nickel Kit, 12 iii to 50 iii ob	(3) 8' Face Width	(10) 2 3/0 OD X 30 AIREIIII A FIPE	11103304				

## **TOWER APPLICATIONS**

SFG23RHDX tower applications SFG23HDX tower applications SFG22HD & SFG22HDX tower applications SFG21HD tower applications



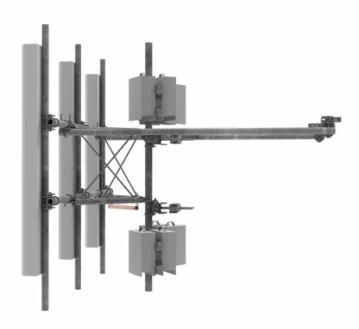
### SFG23RHDX TOWER APPLICATIONS

The Heavy Duty G23RHDX Series features an extended 10-foot spine design that provides radio mounting locations farther away from antennas—which not only reduces PIM by distancing radios from the antenna near field but also increases mount stability and reduces the potential for vibration-induced PIM.

- Decreased PIM from radio relocation
- · Increased versatility and stability
- Better load management

SFG23RHDX sector frame SFG23RHDX-10-3-120

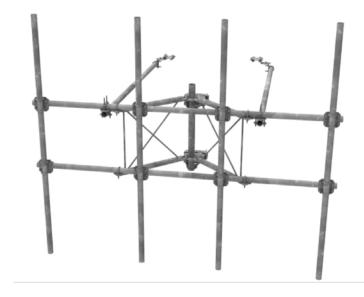
- Decreased antenna pipe loading
- Use with the RR-APEX4 RRU mount for up to 4 radios



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER					
SFG23RHDX Spine Series (RRU Relocation Heavy Duty Xtreme High Capacity Sector Frame) —Meets TIA 5053 standard								
	10' face width	(3) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-10-3-120					
	TO Tace Width	(4) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-10-4-120					
RRU Relocation Heavy Duty Xtreme Heavy Capacity	12' face width	(4) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-12-4-120					
Sector Frame		(5) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-12-5-120					
	14' face width	(4) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-14-4-120					
	IT IGUE WIUTH	(5) 2-7/8" OD X 120" Antenna Pipe	SFG23RHDX-14-5-120					

### **SFG23HDX TOWER APPLICATIONS**

G23 Series Monopole & Tower Sector Frames feature our highest capacity sector frame option when heavy duty load conditions are required. Offerings include 10ft, 12ft, and 14ft face widths with up to 5 antenna pipes per sector and feature double tie-backs.



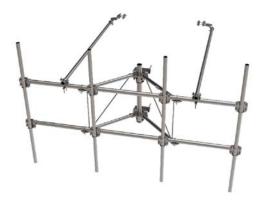
SFG23HDX Sector Frame SFG23HDX-10-4-96

DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER				
SFG23HDX Series (Heavy Duty Xtreme High Capacity Sector Frame)—Meets TIA 5053 standard							
		(3) 2-3/8" OD X 96" Antenna Pipe	SFG23HDX-10-3-96				
	10' Face Width	(4) 2-3/8" OD X 126" Antenna Pipe	SFG23HDX-10-4-126				
		(4) 2-3/8" OD X 96" Antenna Pipe	SFG23HDX-10-4-96				
	12' Face Width	(3) 2-7/8" OD X 120" Antenna Pipe	SFG23HDX-12-3-120				
	12 race width	(4) 2-7/8" OD X 120" Antenna Pipe	SFG23HDX-12-4-120				
Heavy Duty Xtreme High Capacity Sector Frame		(4) 2-7/8" OD X 126" Antenna Pipe	SFG23HDX-12-4-126				
neavy buty Attenne might capacity Sector Frame		(4) 2-7/8" OD X 96" Antenna Pipe	SFG23HDX-12-4-96				
		(4) 2-7/8" OD X 120" Antenna Pipe	SFG23HDX-14-4-120				
	14' Face Width	(4) 2-7/8" OD X 126" Antenna Pipe	SFG23HDX-14-4-126				
		(4) 2-7/8" OD X 96" Antenna Pipe	SFG23HDX-14-4-96				
		(5) 2-7/8" OD X 126" Antenna Pipe	SFG23HDX-14-5-126				
		(5) 2-7/8" OD X 96" Antenna Pipe	SFG23HDX-14-5-96				

#### **SFG22HD AND SFG22HDX TOWER APPLICATIONS**

G22 Series Monopole & Tower Sector Frames feature a medium duty sector frame option for a tailored solution when heavy duty load conditions are not required. Offerings include 10ft, 12ft, and 14ft face widths and feature double tie-backs.

SFG22HD Sector Frame SFG22HD-10-3-96



SFG22HDX Sector Frame SFG22HDX-12-4-96



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER
SFG22HD Series (Heavy Duty Capacity Frame)—Meets TIA 5053 standard			
High Duty Capacity Sector Frame	10' Face Width	(3) 2-3/8" OD X 126" Antenna Pipe	SFG22HD-10-3-126
		(3) 2-3/8" OD X 96" Antenna Pipe	SFG22HD-10-3-96
	12' Face Width	(4) 2-3/8" OD X 126" Antenna Pipe	SFG22HD-12-4-126
		(4) 2-3/8" OD X 96" Antenna Pipe	SFG22HD-12-4-96

DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER	
SFG22HDX Series (Heavy Duty Xtreme Capacity Frame)—Meets TIA 5053 standard				
Heavy Duty Xtreme High Capacity 3-Sector Tower Frame	12' Face Width	(4) 2-3/8" OD X 96" Antenna Pipe	SFG22HDX-12-4-96	
		(4) 2-3/8" OD X 126" Antenna Pipe	SFG22HDX-12-4-126	
	14′ Face Width	(4) 2-3/8" OD X 96" Antenna Pipe	SFG22HDX-14-4-96	
		(4) 2-3/8" OD X 126" Antenna Pipe	SFG22HDX-14-4-126	

#### **SFG21HD TOWER APPLICATIONS**

G21 Series Tower Sector Frames feature a lighter weight frame combined with the sturdy G2 Series base design for an economical option when heavy duty load conditions are not required.

- Offerings limited to 10ft and 12ft face widths
- Feature a single tie-back
- 2-7/8" OD Face Pipes & 2-3/8" OD Antenna Pipes

SFG21HD Sector Frame SFG21HD-10-4-96



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER	
SFG21 Series (Standard Light Capacity Frame)—Meets TIA 5053 standard	SFG21 Series (Standard Light Capacity Frame)—Meets TIA 5053 standard			
		(3) 2-3/8" OD X 96" Antenna Pipe	SFG21HD-10-3-96	
	10' Face Width	(3) 2-3/8" OD X 126" Antenna Pipe	SFG21HD-10-3-126	
Standard Light Capacity Sector Frame		(4) 2-3/8" OD X 96" Antenna Pipe	SFG21HD-10-4-96	
		(4) 2-3/8" OD X 126" Antenna Pipe	SFG21HD-10-4-126	
	12' Face Width	(3) 2-3/8" OD X 96" Antenna Pipe	SFG21HD-12-3-96	
		(3) 2-3/8" OD X 126" Antenna Pipe	SFG21HD-12-3-126	
		(4) 2-3/8" OD X 96" Antenna Pipe	SFG21HD-12-4-96	
		(4) 2-3/8" OD X 126" Antenna Pipe	SFG21HD-12-4-126	

# **REINFORCEMENT KITS AND MODS**

Hoisting grip anchors

Safety climb cable guides

Tower reinforcement kits

Monopole load distribution reinforcement kits

VZWSmart monopole

VZWSmart tower

VZWSmart hardware kits



#### **HOISTING GRIP ANCHORS**

- Solves the cable attachment problem with a purpose built product
- Can be used with any cable type
- Variants supporting:
  - Guyed Towers
  - Monopole
  - Cable Ladders

- Existing cable ladders can be upgraded
- Easy bolt on upgrade

DESCRIPTION	APPLICATION	PART NUMBER
MONOPOLE ANCHOR for 10"-35" OD Poles	Monopole	860669616-1035
OVER-TOP GRIP-ANCHOR for 860669616-1035	Monopole	860669616-1035-T
MONOPOLE, PORT ANCHOR	Monopole	MPH-001
GRIP ANCHOR for PIPE 1.5"-8" OD	Monopole / Pipe / Small Cell Pole	860680188-006
GRIP ANCHOR, 6-hole CABLE LADDER	Cable Ladder	860674608-006
GRIP ANCHOR, 9-hole CABLE LADDER	Cable Ladder	860674608-009
GRIP ANCHOR, 12-hole CABLE LADDER	Cable Ladder	860674608-012
GRIP ANCHOR,CABLE LADDER,40",UNIVERSAL	Cable Ladder	860674608-U
GRIP ANCHOR,GUYED-TOWER,36" FACE	Guyed and Straight Section Self Support	860674607-036
GRIP ANCHOR,GUYED-TOWER,48" FACE	Guyed and Straight Section Self Support	860674607-048
GRIP ANCHOR,GUYED-TOWER,41" or 42" FACE	Guyed and Straight Section Self Support	860674607-041-42









# **SAFETY CLIMB CABLE GUIDES**

ANDREW's Safety Climb Cable guides provide attachment points on Monopoles to help route and protect wire cables.



DESCRIPTION	MOUNTING	PART NUMBER
Safety Climb Cable Guides		
Safety Climb Cable Guide Clamp	Clamp Only	SCG-001
Safety Climb Cable Guide for Round Member Attachment	Round members:1.5"-4"	SCG-002
Safety Climb Cable Guide for Round and Angle Member Attachment	Round members:1.5"-8", 90 degree angle: up to 6" 60 degree angle: up to 8"	SCG-003
Safety Climb Cable Guide for Square Member Attachment	Square members: up to 6"	SCG-004
Safety Climb Cable Guide Collar Mount	ANDREW standard monopole collars such as "MC-RM1550"	SCG-005

#### **TOWER REINFORCEMENT KITS**

ANDREW offers a wide variety of Tower and Monopole antenna mount reinforcements kits to fit virtually any application. Mount reinforcement kits add extra capacity to existing tower or monopole frames to enable mounting of additional equipment without swapping out the entire frame — saving both installation time and money.



DESCRIPTION	MOUNTING	PART NUMBER
Interlocking Channel Supports	Small leg size (2" - 8")	VSRC-TS-B
Adjustable from 34.5" to 57.5"	Large leg size (8″ - 16″)	VSRC-TL-B
V-Stabilizer™	Small leg size (2″ - 8″)	VSR-TS-B
48" channel supports	Large leg size (8″ - 16″)	VSR-TL-B
V-Stabilizer™	Small leg size (2″ - 8″)	VSRA-TS-B
Adjustable up to 60″ angle supports	Large leg size (8″ - 16″)	VSRAL-TS-B
Dual V-Stabilizer™ 60" pipe supports	Small leg size (2″ - 8″)	VSRDual-TS-B
Dual V-Stabilizer™	Small leg size (2″ - 8″)	VSRDUALA-TS-B
Adjustable up to 60″ angle supports	Large leg size (8″ - 16″)	VSRDUALAL-TS-B

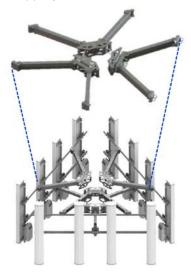
### **LARGE LEG ADAPTER KITS**

DESCRIPTION	PART NUMBER
Large Leg Adapter Kits Clamp system, 8″ and up to 16″ OD tower leg	
Single all-thread	SFG2393-LLHK
Double all-thread	SM-U2016HDG23

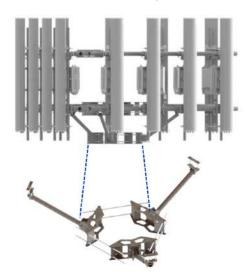


#### MONOPOLE LOAD DISTRIBUTION REINFORCEMENT KITS

ANDREW offers a wide variety of Tower and Monopole antenna mount reinforcements kits to fit virtually any application. Mount reinforcement kits add extra capacity to existing tower or monopole frames to enable mounting of additional equipment without swapping out the entire frame — saving both installation time and money.



Three Sector V-Stabilizer™ Kit VSR-MS-B



**Three Sector Load Distribution Reinforcement Kit** RK-36-3S

DESCRIPTION	MOUNTING DIAMETER	PART NUMBER	
Three Sector Load Distribution Reinfo	orcement Kits Includes: Ring mount and support arms fo	r 3 sectors	
Interlocking Channel Supports Adjustable from 34.5" to 57.5"	15" - 50"	VSRC-MM-1550	
	10" - 30"	RK-36-3S	
36" Support Arm	12" - 50"	VSR-MS-B	
oo oupport Aim	15" - 50"	RK-36-3M	
	30" - 60"	RK-36-3L	
	10" - 30"	RK-60-3S	
60" Support Arm	15" - 50"	RK-60-3M	
	30" - 60"	RK-60-3L	
Field Adjustable 10' Support Arm	30" - 60"	MTC38523L	
Four Sector Load Distribution Reinfor	cement Kits Includes: Ring mount and support arms for	4 sectors	
36" Support Arm	10" - 30"	RK-36-4S	
оо опрротент	30" - 60"	RK-36-4L	
60" Support Arm	10" - 30"	RK-60-4S	
oo Support Aiiii	30" - 60"	RK-60-4L	
TOP RAIL REINFORCEMENT KIT Universal monopole platform reinforce	ement kit	PVS-050B-U	

# **VZWSMART MONOPOLE**



DESCRIPTION	PART NUMBER
VZWSmart Monopole Applications	
Hand-rail kit, 2-7/8" x 150", adjustable corner brace, Hardware for 2-7/8" Antenna Pipes	VZWSMART-PLK1
Hand-rail corner bracing kit, 2-7/8" Pipe connections, No Antenna Pipe Hardware	VZWSMART-PLK2
Hand-rail Corner bracing Kit Supports, One Corner, U-bolts for 2-7/8" Pipe, No Angle Braces Included	VZWSMART-PLK3
Kicker Support Arm, 3" x 3" x 96" Angle with Connecting Brackets and Hardware for up 3" to 6" square or 3-1/2" to 4-1/2" 0D Stand-offs, 3 sectors, Collar Mount not included	VZWSMART-PLK5
Dual Pivoting Kicker Support Arms, 2-1/2"x 2-1/2" x 60"Angle with Connecting Brackets and Hardware, Collar Mount/pipe not included	VZWSMART-PLK6
Ring Mount, 12" to 45" Monopole Diameter with 6" x 6" x 5/8" bolt pattern	VZWSMART-PLK7
Hand-Rail Reinforcement Kit, Vertical, One Sector Only, attaches up to 3-1/2" OD horizontal & up to 6" square standoff	VZWSMART-PLK8
Reinforcement Arm, 3" x 3" x 72" Square Tube, Collar mount not included	VZWSMART-SFK4

# **VZWSMART TOWER**



DESCRIPTION	PART NUMBER
VZWSmart Tower Applications	
Stiff Arm, 2-3/8" x 12 ft Pipe, Attachment Hardware, for 1-1/2" to 8" OD or 60 degree angle tower leg	VZWSMART-SFK1
V-Stabilizer for Tower, saddle clamps for 1″- 8″, Dual Pivoting Angle Arms, 96″ long, attaches up to 4-1/2″ 0D horizontals	VZWSMART-SFK3
V-Stabilizer for Small Tower Leg, Clamps for up to 3-1/2" round legs, Dual Pivoting Angle Arms, 96" long, attaches up to 4-1/2" OD horizontals	VZWSMART-SFK3-SL

# **VZWSMART HARDWARE KITS**

VZWSMART-MKS3

Pipe to Pipe Clamp





DESCRIPTION	PART NUMBER
VZWSmart—Meets TIA 5053 standard	
Hardware Kits	
Small Cross-Over Plate, 2-3/8" or 2-7/8" Pipes	VZWSMART-MSK1
Medium Cross-Over Plate, connects 2-3/8" to 2-7/8" pipes to 3-1/2" to 4" pipes	VZWSMART-MSK2
Pipe to Pipe, Clamps for 1-1/2" to 4-1/2" Pipes	VZWSMART-MSK3
Pipe to Pipe, Clamps, Wide, HD, for 1-1/2" to 3-1/2" Pipes, with double threaded Rod	VZWSMART-MSK3D
Pipe Mount, Tapered, No U-Bolts, attaches up to 8" OD or 60 degree angle Tower Legs, For Pipes 2-3/8" to 4-1/2" OD, U-Bolts sold separately	VZWSMART-MSK4
Large Cross-Over Plate, connects 2-3/8" to 2-7/8" pipes to 4" to 4-1/2" pipes	VZWSMART-MSK5
Dual Cross Over Plate, Mounts (2) 3-1/2" to 4-1/2" Pipes to 4" or 6" Square Tube	VZWSMART-MSK6
Cross Over Plate, Mounts up to 4-1/2" Pipe, Pipe to Angle, Pipe/Angle not included	VZWSMART-MSK7
Corner Support Bracket Kit, Mounts to Pipe up to 4-1/2", Pipe/Corner Angle brace not included	VZWSMART-MSK8
Leg Clamp, 1/2" to 3-1/2" Round & Up to 3" Angle	VZWSMART-MSK9
Wire Rope Routing Bracket Accessory for Ring Mounts, Ring Mount not included	VZWSMART-MSK10

### **ROOF TOP APPLICATIONS**

Single and Dual Penetrating Rooftop Frame

Single and Dual Ballasted Rooftop Frame

Medium Capacity Roof Frames

Universal Tripod Mounts

Mounting Components

Microwave Mounting Components



#### SINGLE AND DUAL PENETRATING ROOFTOP FRAME

ANDREW now offers a complete line of high-capacity rooftop pipe sector frames designed for increased loading and lower EPA than traditional angle-based rooftop frames. The new RT-Series rooftop mounts are available in both penetrating and nonpenetrating frame designs with multiple face size and pipe count options offered as a single part number to simplify ordering.

The RT-Series rooftop mounts all feature heavy duty 2 7/8" OD face pipes and antenna pipes and are rated to both AT&T and TIA-5053 standards with up to 5 antenna pipes (face width dependent). The frame features built-in mechanical adjustments for roof pitch with either single or dual frame versions to maximize load bearing capabilities.

Single Penetrating **RT Series Rooftop Frame** RT-SF10-3-126



**Dual Penetrating RT Series Rooftop Frame** RT-DSF12-3-126



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER	
Single Penetrating Rooftop Frame—Meets TIA 5053 standard				
		(2) 2-7/8" OD X 96" Antenna pipes	RT-SF7-2-96	
	7' Face Width	(2) 2-7/8" OD X 126" Antenna pipes	RT-SF7-2-126	
	/ race width	(3) 2-7/8" OD X 96" Antenna pipes	RT-SF7-3-96	
		(3) 2-7/8" OD X 126" Antenna pipes	RT-SF7-3-126	
		(3) 2-7/8" OD X 96" Antenna pipes	RT-SF10-3-96	
Single Penetrating rooftop sector frame	10' Face Width	(3) 2-7/8" OD X 126" Antenna pipes	RT-SF10-3-126	
omgle i enetrating room op sector frame	10 Tace Width	(4) 2-7/8" OD X 96" Antenna pipes	RT-SF10-4-96	
		(4) 2-7/8" OD X 126" Antenna pipes	RT-SF10-4-126	
		(3) 2-7/8" OD X 96" Antenna pipes	RT-SF12-3-96	
	12' Face Width	(3) 2-7/8" OD X 126" Antenna pipes	RT-SF12-3-126	
	12 I due Wiutii	(4) 2-7/8" OD X 96" Antenna pipes	RT-SF12-4-96	
		(4) 2-7/8" OD X 126" Antenna pipes	RT-SF12-4-126	

DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER	
Dual Penetrating Rooftop Frame—Meets TIA 5053 standard				
	12' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-DSF12-3-96	
		(3) 2-7/8" OD x 126" Antenna pipes	RT-DSF12-3-126	
Dual penetrating rooftop sector frame		(4) 2-7/8" OD x 96" Antenna pipes	RT-DSF12-4-96	
		(4) 2-7/8" OD x 126" Antenna pipes	RT-DSF12-4-126	
	14' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-DSF14-3-96	
		(3) 2-7/8" OD x 126" Antenna pipes	RT-DSF14-3-126	
		(4) 2-7/8" OD x 96" Antenna pipes	RT-DSF14-4-96	
		(4) 2-7/8" OD x 126" Antenna pipes	RT-DSF14-4-126	

# **SINGLE AND DUAL BALLASTED ROOFTOP FRAME**

Single Ballasted **RT Series Rooftop Frame** RT-NF10-3-96 (Shown with RT-NFR4 RRU Mou



**Dual Ballasted RT Series Rooftop Frame** RT-DF12-4-126



DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER
Single Ballasted Rooftop Frame—Meets TIA 5053	standard		
		(2) 2-7/8" OD x 96" Antenna pipes	RT-NF7-2-96
	7' Face Width	(2) 2-7/8" OD x 126" Antenna pipes	RT-NF7-2-126
	7 race width	(3) 2-7/8" OD x 96" Antenna pipes	RT-NF7-3-96
		(3) 2-7/8" OD x 126" Antenna pipes	RT-NF7-3-126
	10' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-NF10-3-96
Single ballasted rooftop sector frame		(3) 2-7/8" OD x 126" Antenna pipes	RT-NF10-3-126
Single ballasted routtop sector frame		(4) 2-7/8" OD x 96" Antenna pipes	RT-NF10-4-96
		(4) 2-7/8" OD x 126" Antenna pipes	RT-NF10-4-126
	12' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-NF12-3-96
		(3) 2-7/8" OD x 126" Antenna pipes	RT-NF12-3-126
		(4) 2-7/8" OD x 96" Antenna pipes	RT-NF12-4-96
		(4) 2-7/8" OD x 126" Antenna pipes	RT-NF12-4-126
RRU Mounting Kit for RT Series Ballasted Frames	N/A	N/A	RT-NFR4

DESCRIPTION	FACE WIDTH	PIPES INCLUDED	PART NUMBER
Dual Ballasted Rooftop Frame—Meets TIA 5053 s	tandard		
	12' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-DF12-3-96
		(3) 2-7/8" OD x 126" Antenna pipes	RT-DF12-3-126
		(4) 2-7/8" OD x 96" Antenna pipes	RT-DF12-4-96
Dual Ballasted rooftop sector frame		(4) 2-7/8" OD x 126" Antenna pipes	RT-DF12-4-126
Dual ballasteu foortop sector frame	14' Face Width	(3) 2-7/8" OD x 96" Antenna pipes	RT-DF14-3-96
		(3) 2-7/8" OD x 126" Antenna pipes	RT-DF14-3-126
		(4) 2-7/8" OD x 96" Antenna pipes	RT-DF14-4-96
		(4) 2-7/8" OD x 126" Antenna pipes	RT-DF14-4-126
RRU Mounting Kit for RT Series Ballasted Frames	N/A	N/A	RT-NFR4

# **MEDIUM CAPACITY ROOF FRAMES**

RF-NL Non-penetrating **Angle Roof Frames** RT-NF10-3-96



Roof-top Frame RRU Retro Kit



DESCRIPTION	PART NUMBER	
Non-penetrating Roof Frame, 7' -6" (2.3 m) Wide (Angle-based design)		
Base Frame Kit Only - 3-1/2" OD (88.9 mm OD) Pipes Ordered Separately	RF-NL7-B	
Two 3-1/2" OD x 72" (88.9 mm OD x 1.8 m) Pipes	RF-NL7-2-72	
Three 3-1/2" OD x 72" (88.9 mm OD x 1.8 m) Pipes	RF-NL7-3-72	
Two 3-1/2" OD x 96" (88.9 mm OD x 2.4 m) Pipes	RF-NL7-2-96	
Three 3-1/2" OD x 96" (88.9 mm OD x 2.4 m) Pipes	RF-NL7-3-96	
Non-penetrating Roof Frame, 10′-6″ (3.2 m) Wide (Angle-based design)		
Base Frame Kit Only - 3-1/2" OD (88.9 mm OD) Pipes Ordered Separately	RF-NL10-B	
Two 3-1/2" OD x 72" (88.9 mm OD x 1.8 m) Pipes	RF-NL10-2-72	
Three 3-1/2" OD x 72" (88.9 mm OD x 1.8 m) Pipes	RF-NL10-3-72	
Two 3-1/2" OD x 96" (88.9 mm OD x 2.4 m) Pipes	RF-NL10-2-96	
Three 3-1/2" OD x 96" (88.9 mm OD x 2.4 m) Pipes	RF-NL10-3-96	
Roof-top Frame RRU Retrofit Kit		
RRU Retrofit Kit	RF-NRK	

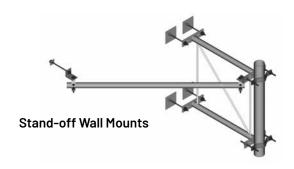
# **UNIVERSAL TRIPOD MOUNTS**





DESCRIPTION	PART NUMBER
Universal Tripod Mount, 2-7/8" or 3-1/2" OD (73 mm or 88.9 mm OD)	
Base Only for 2-7/8" or 3-1/2" OD (73 mm or 88.9 mm OD), Pipe Ordered Separately	TP-G300-B
2-7/8" OD x 96" (73 mm OD x 2.4 m)	TP-G300-96
2-7/8" OD x 126" (73 mm OD x 3.2 m)	TP-G300-126
3-1/2" OD x 96" (88.9 mm OD x 2.4 m)	TP-G312-96
3-1/2" OD x 126" (88.9 mm OD x 3.2 m)	TP-G312-126
Universal Tripod Mount, 4-1/2" OD (114.3 mm OD)	
Base Only for 4-1/2" OD (114.3 mm OD), Pipe Ordered Separately	TP-G412-B
4-1/2" OD x 96" (114.3 mm OD x 2.4 m)	TP-G412-96
4-1/2" OD x 126" (114.3 mm OD x 3.2 m)	TP-G412-126
4-1/2" OD x 150" (114.3 mm OD x 3.8 m)	TP-G412-150
Non-penetrating Roof Ballast Sled for Tripods	
Non-penetrating Roof Sled, Tripod Mount Ordered Separately	MT-416
Rubber Mat, 1/2" x 18" x 48" (13 mm x 457 mm x 1219 mm), Six Mats Required for Ballast Tray	MT-F1637

# **WALL MOUNTING COMPONENTS**

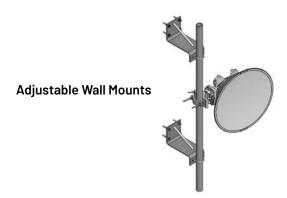






DESCRIPTION	PART NUMBER	
Stand-off Wall Mount		
Stand-off Wall Mount, 36" (914 mm), for Solid and Hollow Walls, Includes 72" (1829 mm) Stiff Arm	DM-300	
Corner Wall Mount With 2-3/8" OD (60.3 mm OD) Antenna Pipe		
96" (2.4 m) Pipe	CW-M2-96	
Corner Wall Mount With 4-1/2" OD (114.3 mm OD) Antenna Pipe		
96" (2.4 m) Pipe	CW-M4-96	

# **MICROWAVE AND WALL MOUNTS**



#### Roof-top Microwave Dish Ballast Mount System



DESCRIPTION	PART NUMBER
Adjustable Wall Mounts, 6" (152.4 mm) Stand-off	
For Hollow Walls, Includes Backing Plates, Kit of 2	MT-221
For Solid Walls, Includes Wall Anchors, Kit of 2	MT-222
Adjustable Wall Mounts, 12" (305 mm) Stand-off	
For Hollow Walls, Includes Backing Plates, Kit of 2	MT-221L
For Solid Walls, Includes Wall Anchors, Kit of 2	MT-222L
Optional Backing Plate	
Backing Plate Kit, 12" x 12" (305 mm x 305 mm)	MT-223
Roof-top Microwave Dish Ballast Mount System	·
Three 4.5" OD X 8' Supports with 3.5" OD Strut Support Member	RF-MW8-B

# **EQUIPMENT PLATFORMS**

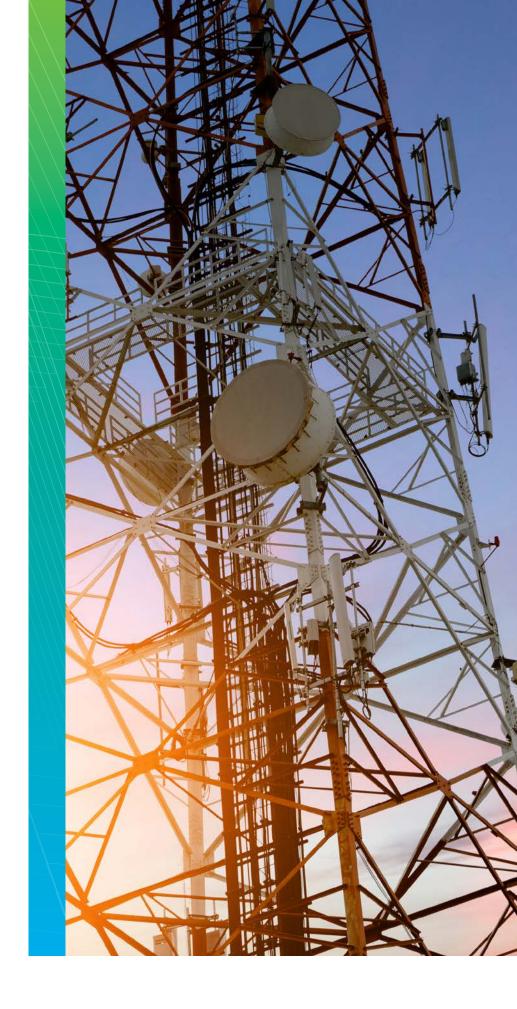
Equipment platforms

Ice canopy

Equipment platform legs

Power telco racks

Handrail and step kits



#### **EOUIPMENT PLATFORMS**

#### **EOUIPMENT PLATFORM SOLUTIONS**

ANDREW equipment platforms are delivered unassembled and erected on-site. They are designed to assemble quickly, easily and without the need for a cement pad. No permitting, no need for cement forms or rebar. No wasted time spent waiting for the pad to cure. Should cabling beneath the platform need to be moved, there is no need to dig up the pad and re-pour—simply re-route as needed.

The base equipment platform features grating, platform and all the hardware needed. A variety of options enable you to tailor the platform size, footings, canopy type and more to the requirements of the job. Additional add-ons—like power telco racks, handrails, steps and climbing ladders—let you create a flexible platform solution that can adapt to the specific needs of each site as the network and site requirements evolve.

To order, specify your desired length and width (in 2-ft increments), then select footing type per charts below:

Step 1: Select

PLATFORM WIDTH (2-FT. INCREMENTS, 26 FT. MAX)		
1	04	4 ft. (Minimum width)
	26	26 ft. (Minimum width)

Step 2: Select

ORM LENGTH (2-FT. INCREMENTS, 26 FT. MAX)		
	04	4 ft. (Minimum length)
2	26	26 ft. (Minimum length)

Step 3: Select

PLATFORM SUPPORT/FEET OPTION		
	В	No feet, base platform only
3	AL	Adjustable legs with side leg jack
	DF	Weight disbursement feet



**Equipment platform** 

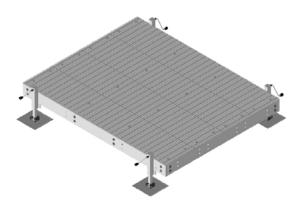
#### PART NUMBER MATRIX



# **EQUIPMENT PLATFORMS**

#### 8" Channel Equipment Platforms







DESCRIPTION	EXAMPLE PART NUMBERS
Equipment Platform Bases, 8″ Channel, Heavy Duty, for Up to 10,000 lb Loading	
8' x 10' (2.4 m x 3 m) Base Only	EQ-P0810-B
8' x 10' (2.4 m x 3 m)	EQ-P0810-AL
8' x 12' (2.4 m x 3.8 m) Base Only	EQ-P0812-B
8' x 12' (2.4 m x 3.8 m)	EQ-P0812-AL
8' x 14' (2.4 m x 4.4 m) Base Only	EQ-P0814-B
8' x 14' (2.4 m x 4.4 m)	EQ-P0814-AL
8' x 16' (2.4 m x 5 m) Base Only	EQ-P0816-B
8' x 16' (2.4 m x 5 m)	EQ-P0816-AL

Equipment platforms with custom compact foot option to address tight lease spaces where footprint of the platform, including supporting piers, cannot exceed lease space.

DESCRIPTION	EXAMPLE PART NUMBERS
DF-CF Concealed Foot Options	
10' x 10' Platform with Compact Foot Option	EQ-P1010-DF-CF
10' x 15' Platform with Compact Foot Option	EQ-P1015-DF-CF
10' x 20' Platform with Compact Foot Option	E0-P1020-DF-CF

### **ICE AND RAIN CANOPIES**

Specifying the right ice canopy is even easier. Use the format below to tell us the length and width you need and the type of footing you prefer.

Step: Select

CANOPY TYPE	
	IC = Ice Canopy
1	RC= Rain/Shade Canopy

Step: Select

CANOPY LENGTH		
	06	6 ft.
2	08	8 ft.
	10	10 ft.

Step: Select

CANOPY WID	ГН	
7	10	10 ft.
3	12	12 ft.

Step: Select

CANOPY FOOTING		
4	В	Direct burial posts, 13 ft. 4 in. tall
	S	Base shoe pipes 10.5 ft. tall

#### PART NUMBER MATRIX



#### **EXAMPLE PART NUMBER:**

RC-0610-B = 6' x 10'

Rain canopy with burial posts

#### **Ice Canopy**



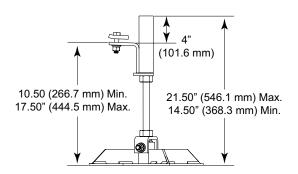
**Rain Canopy** 

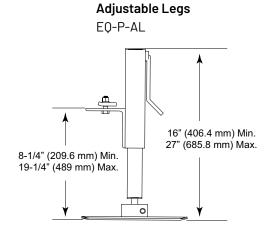


### **EQUIPMENT PLATFORM LEGS**

### **Weight Dispersement Legs**

EQ-P-DF





DESCRIPTION	PART NUMBER	
Equipment Platform Legs		
Adjustable Leg for Equipment Platform for Raw Land Installations	EQ-P-AL	
Weight Dispersement Leg for Equipment Platforms	EQ-P-DF	
Helical Footings*		
7' Long, 8.5" Diameter Helical Anchor	ST-HB07	
10' Long, 10.75" Diameter Helical Anchor	ST-HB10	
15' Long, 10.75" Diameter Helical Anchor	ST-HB15	

<sup>\*</sup>Helical anchors are custom order products check with steelproducts@andrew.com for current lead times & pricing

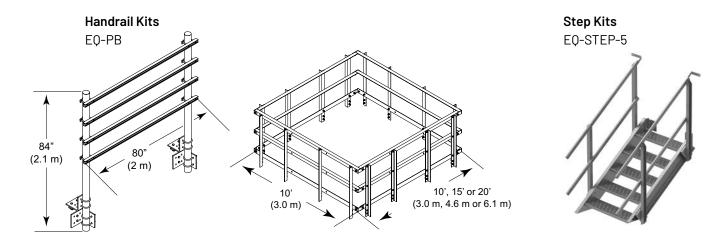
# **POWER TELCO RACKS**

**Power Telco Racks** PT-R104



DESCRIPTION	WEIGHT, LB (KG.)	PART NUMBER	
Telco Racks With 13′-4″ (4.1 m) Burial Posts and 80″ (2 m) Horizontal Rails			
Power Telco Rack, Two 80" (2 m) Rungs, 13'-4" (4.1 m) Burial Posts	135 (62.0)	PT-R102	
Power Telco Rack, Three 80" (2 m) Rungs, 13'-4" (4.1 m) Burial Posts	150 (68.0)	PT-R103	
Power Telco Rack, Four 80" (2 m) Rungs, 13'-4" (4.1 m) Burial Posts	165 (75.0)	PT-R104	
Power Telco Rack Kit for EQ-P Series Platforms			
Two Post Power Telco Rack Kit, Includes Brackets	262 (118.9)	EQ-PPC	
Post Bracket Kit for Waveguide Bridge Attachment to EQ-P Series Platforms			
Mounts 3 1/2" (88.9mm) OD Pipe	715 (324.3)	EQ-PB	

# **HANDRAIL AND STEP KITS**



DESCRIPTION	PART NUMBER	
Handrail Kit for EQ-P Series Platforms		
For 10' x 10' (3 m x 3 m) Platform	EQ-HR1010	
For 10' x 15' (3 m x 4.6 m) Platform	EQ-HR1015	
For 10' x 20' (3 m x 6.1 m) Platform	EQ-HR1020	
Ladder for EQ-P Series Platforms		
Climbing Ladder for EQ-P Series Platforms	EQ-LD	
Step Kits for EQ-P Series Platforms		
Single Platform Step for EQ-P Series Platforms	EQ-STS	
Double Step Kit for EQ-P Series Platforms	EQ-STEP-2	
Triple Step Kit for EQ-P Series Platforms	EQ-STEP-3	
Four Step Kit for EQ-P Series Platforms	EQ-STEP-4	
Five Step Kit for EQ-P Series Platforms	EQ-STEP-5	
Six Step Kit for EQ-P Series Platforms	EQ-STEP-6	
Power Telco Rack Kit for EQ-P Series Platforms		
Two Post Power Telco Rack Kit for EQ-P Series Platforms. Includes Brackets	EQ-PPC	
Post Bracket Kit for Waveguide Bridge Attachment to EQ-P Series Platforms		
Mounts 3-1/2" (88.9 mm) OD Pipe	EQ-PB	

# **RADIO MOUNTS**

RRU mounts

PAM universal pipe-to-angle mount kits

Stand-off arm mounts

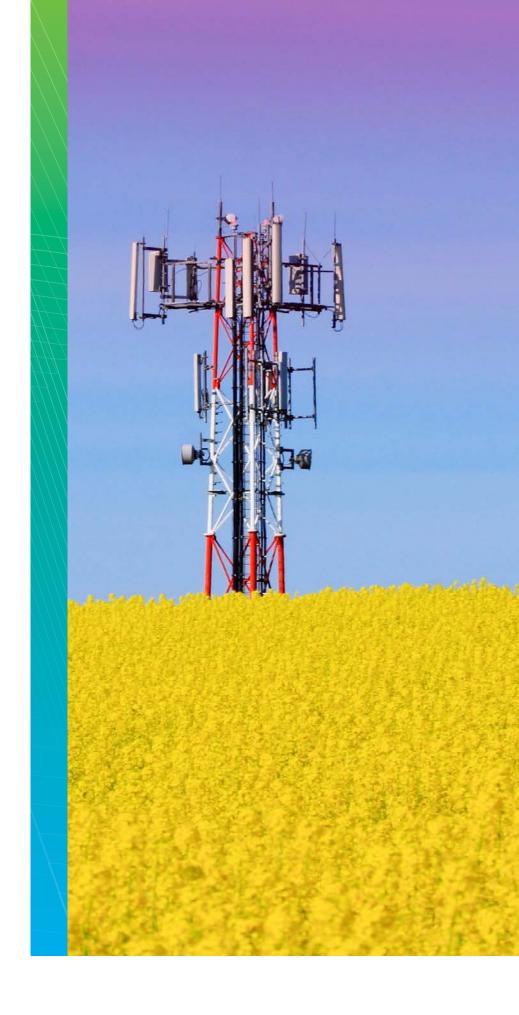
Tower mounts

Monopole mounts

Ground level mounts

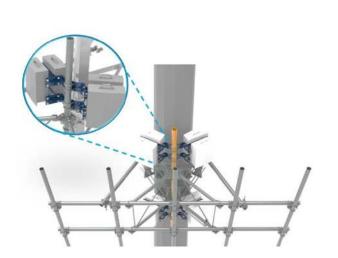
Outdoor RRU mount racks

RRU mount racks

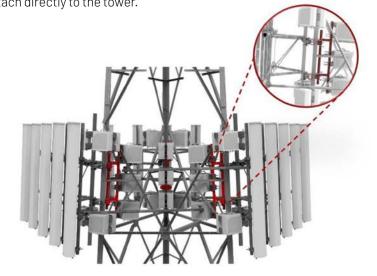


#### **RRU MOUNTS**

ANDREW offers a full line of RRH/RRU mounts which are designed to securely support radios and help prevent outdoor elements from affecting equipment performance. The RRU brackets mount securely to a wide range of round or angled members to enable mounting to the tower sector frame along with options that attach directly to the tower.



**APEX RRU Mounting** RR-APEX4



Core RRU Mounting Bracket MTC4112

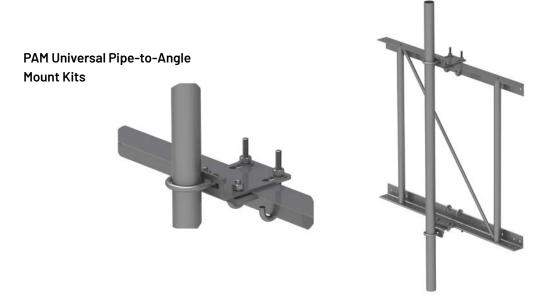
DESCRIPTION	MOUNTING	PART NUMBER
APEX RRU mount		
RRU mounting for up to 4 radios	3.5" OD Round Members	RR-APEX4
CORE saddle mount		
CORE RRU mounting bracket 1' stand off	3.5" OD Round Members	MTC4112
CORE RRU mounting bracket 2' stand off	3.5" OD Round Members	MTC4113
Fast Access		
Fast Access RRU mounting bracket	Round & Angled Up To 6"	RR-FA2
Large stiffener bracket	RR-FA2 Only	RRFA-0002-00
Back to Back		
Back to Back RRU mounting bracket	3.5" OD Round Members	RR-B2B-AR
Back to Back RRU mounting bracket	4.5" OD Round Members	RR-B2B-LP

#### PAM UNIVERSAL PIPE-TO-ANGLE MOUNT KITS

ANDREW announces the release of PAM, a new Universal Pipe-to-Angle Mount Kit designed for mounting equipment support pipes directly to angled sector frame or tower members. These kits are compatible with angle-style sector frames, such as the ANDREW SF-QV Series and SF-SU Series or can mount directly to 90 degree angled tower members. PAM attaches pipes 2" to 3 1/2" OD (sold separately) to 90° angles from 2 to 4 inches. Mounting hardware is included for 2 3/8" pipes and u-bolts for other pipe sizes can be ordered separately.

- · Mounts pipe directly to angled sector frame or tower members
- Universal mounting to either side of angle
- For 90° angles from 2 to 4 inches

- Compatible with Pipes 2" to 3 1/2" OD
- Includes U-bolts for Mounting 2 3/8" Pipes



DESCRIPTION	PART NUMBER
Universal Pipe-to-Angle Mount Kit for mounting 2in to 3.5in OD pipe to 90-degree angles 2in to 4in. HW incl for 2-3/8in pipe (Pipe not included)	PAM

# **STAND-OFF ARM MOUNTS**

#### Stand-off Arm Mounts

XP-197-S





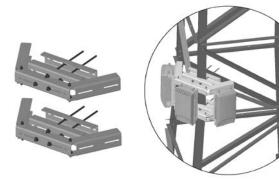


DESCRIPTION	PART NUMBER
Stand-off Arm Mounts	
Crossover Plates for Mounting One 2-3/8" OD (60.3 mm OD) Antenna Mounting Pipe to 4-1/2" OD (114.3 mm) Round or 4" (101.6 mm) Square Standoff Arms	XP-197-S
Crossover Plates for Mounting Two 2-3/8" OD (60.3 mm OD) Antenna Mounting Pipes to 4-1/2" OD (114.3 mm OD) Round or 4" (101.6 mm) Square Stand-off Arms	XP-197-D
Crossover Plate for Mounting One 2-3/8" to 3-1/2" OD (60.3 mm to 88.9 mm OD) Antenna Mounting Pipe to 4-1/2" OD (114.3 mm OD) Round or 4" (101.6 mm) Square Stand-off Arms	XP-197-US
Crossover Plates for Mounting Two 2-3/8" to 3-1/2" OD (60.3 mm to 88.9 mm OD) Antenna Mounting Pipes to 4-1/2" OD (114.3 mm OD) Round or 4" (101.6 mm) Square Stand-off Arms	XP-197-UD
Crossover Plates for Mounting One 2-3/8" to 3-1/2" (60.3 mm to 88.9 mm) RRU Pipe to 3-1/2" (88.9 mm) Round or up to 4" (101.6 mm) Square Stand-off Arms	XP-197-35US
Crossover Plates for Mounting Two 2-3/8" to 3-1/2" (60.3 mm to 88.9 mm) RRU Pipes to 3-1/2" (88.9 mm)Round or up to 4" (101.6 mm) Square Stand-off Arms	XP-197-35UD
1 RRU Crossover Plates for Mounting RRUs to 3.5" to 4.5" Square or 3"to 6" Rectangular Tube	XP-PM-S
2 RRU Crossover Plates for Mounting RRUs to 3.5" to 4.5" Square or 3" to 6" Rectangular Tube	XP-PM-D

# **TOWER MOUNTS**

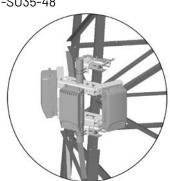
#### **Universal RRU Mount**

PM-RU3T



#### **Universal Sliding Pipe Mount**

PM-SU35-48



DESCRIPTION	PART NUMBER	
Universal RRU Mount		
Mount for Attaching up to Three RRUs to Straight Tower Legs	PM-RU3	
Mount for Attaching up to Three RRUs to Straight or Tapered Tower Legs	PM-RU3T	
Universal Sliding Pipe Mount Kit		
Universal Sliding Pipe Mount Kit, 3-1/2" OD x 48" (88.9 mm OD x 1.2 m) Mounting Pipe	PM-SU35-48	

# **MONOPOLE MOUNTS**

6-Sector Pipe Mount Kit

RR-RM1560



### 3-Sector Dual Radio Ring Mount

MC-RR1050-3



DESCRIPTION	WEIGHT, LB (KG)	PART NUMBER
Six Sector Pipe Ring Mount		
Pipe Mount Kit, for 15" to 60" OD (381 mm to 1524 mm OD) Monopoles	97 (44)	RR-RM1560
Three Sector Dual Radio Ring Mount		
MC-RR1050-3 Pipe Mount, for 10" to 50" OD (254 mm to 1270 mm OD) Monopoles	101 (45.7)	MC-RR1050-3

# **GROUND LEVEL MOUNTS**

#### Ground Level Mounting RRU's

CS-BR RR-BSP-10





#### Ice Shield

RR-IS24



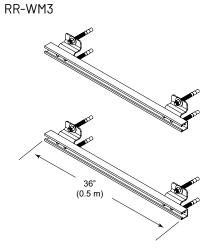
DESCRIPTION	PART NUMBER	
Ground Level Mounting RRU's		
3-1/2" OD x 126" (88.9 mm OD x 3.2 m) Base Shoe Pipe With 14-1/2" x 14-1/2" (368.3 mm x 368.3 mm) Base Plate	RR-BSP-10	
Cluster Support Bracket, 5 Lines, for 3-1/2" OD (88.9 mm OD) Members	CS-BR	
Cluster Support Bracket, 18 Lines, for 3-1/2" OD (88.9 mm OD) Members	CS-BRL	
Ice Shield		
24" x 24" (609 mm x 609 mm) Ice Shield	RR-IS24	

# **OUTDOOR RRU MOUNT RACKS**

**Roof-top Mount** RR-HFBP5



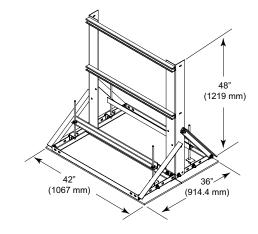
**Wall Mount** 



DESCRIPTION	PART NUMBER	
Remote Radio H-Frame		
Remote Radio H-Frame Burial Pole 5'	RR-HFBP5	
Remote Radio H-Frame Base Shoe 5'	RR-HFBS5	
Wall Mount		
Remote Radio Wall Mount 3'	RR-WM3	

### **RRU MOUNT RACKS**

Non-penetrating Roof-top Mounting RRU's RR-TFS



DESCRIPTION	PART NUMBER
Non-penetrating Roof-top Mounting RRU's	
Non-penetrating Ballast Mount for RRU's	RR-TFS

### **CABLE SUPPORT PRODUCTS**

Polymer PIM-GUARD® cable support brackets

PIM-GUARD cable support brackets

Antenna RRU cable support brackets

Cable ladder kits

Waveguide bridge components

Trapeze kits and Z-brackets



#### POLYMER PIM-GUARD® CABLE SUPPORT BRACKETS

ANDREW® now offers a full line of Polymer PIM-GUARD Cable Support Brackets to reduce PIM around radios and antennas. The new PGP-Series consists of multiple modular configurations that are used to create cable support brackets with port counts ranging from 4 to 16 - with each port able to accept up to 3 Snap-Tak cable hangers.

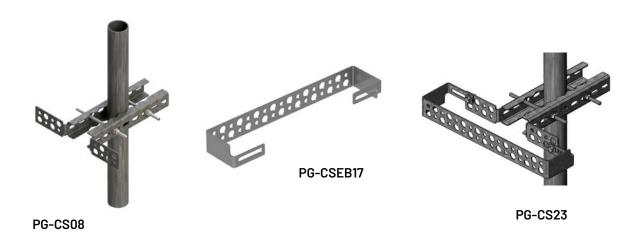


DESCRIPTION	MOUNTING	DESCRIPTION
Polymer PIM-GUARD Cable Support Brackets		
Polymer PIM-GUARD cable support bracket - 4 ports	Round members: 2-3/8" - 3"	PGP-CS04
Polymer PIM-GUARD cable support bracket - 8 ports		PGP-CS08
Polymer PIM-GUARD cable support bracket - 10 ports		PGP-CS10
Polymer PIM-GUARD cable support bracket - 12 ports		PGP-CS12
Polymer PIM-GUARD cable support bracket - 16 ports		PGP-CS16

#### POLYMER PIM-GUARD® CABLE SUPPORT BRACKETS

PIM-GUARD (PG) Series Cable Support Brackets are designed with clamps that firmly secure the brackets to antenna pipes, eliminating loose metal connections which can cause PIM issues. Manufactured from hot-dipped galvanized steel, PG Series Cable Support Brackets also eliminate PIM concerns from dissimilar metals or corrosion. The PG Series is recommended for use with ANDREW's new SnapTak™ PIM-GUARD adjustable hangers made from an engineered composite material to eliminate PIM near critical antenna and RRU connections.

- · PIM-GUARD family of cable attachment and support
- · Secure metal clamp designs
- · Hot-dipped galvanized steel

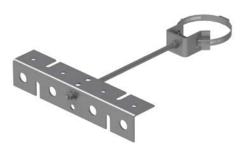


DESCRIPTION	PART NUMBER
8-port Cable Support Bracket Kit. Mounts to 1.9" to 4.5" OD Pipe	PG-CS08
Cable Support Expansion Bracket to expand PG-CS08 to 23 ports	PG-CSEB17
23-port Cable Support Bracket Kit. Mounts to 1.9" to 4.5" OD Pipe	PG-CS23
6-port Bracket kit for Round Members 2 3/8" to 3 1/2" OD	PG-RM06

#### **ANTENNA RRU CABLE SUPPORT BRACKETS**

Single Leg Cable Support

ACS-4



#### **Dual Leg Cable Support**

ACS-D24



DESCRIPTION	PART NUMBER	
Single Leg Cable Support		
Antenna and RRU Cable Support Bracket - 4 ports	ACS-4	
Antenna and RRU Cable Support Bracket - 12 ports	ACS-12	
Dual Leg Cable Support		
RRU Dual Leg Cable Support Bracket - 24 ports	ACS-D24	

#### **Star Support Brackets**

SS-TB2550



#### **Universal Round Member Support Bracket**

RM-USBG

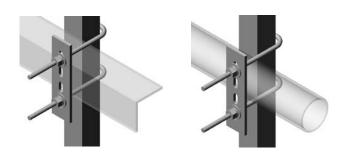


DESCRIPTION	WEIGHT, LB (KG)	PART NUMBER
Star Support Tee Bracket		
1-1/2" to 5-9/16" OD (38.1 mm to 141.3 mm OD) Round Members and 2-1/2" to 5" (50.8 mm to 127 mm) Angle Members	8 (3.6)	SS-TB2550
4" to 10-3/4" OD (101.6 mm to 273.1 mm OD) Round Members and 4" to 8" (101.6 mm to 203.2 mm) Angle Members	10 (4.5)	SS-TB6080
Universal Round Member Support Bracket		
Universal Round Member Support Bracket for 6 Runs, Kit of 10	9.0 (4.1)	RM-USBG

# **CABLE LADDER KITS**

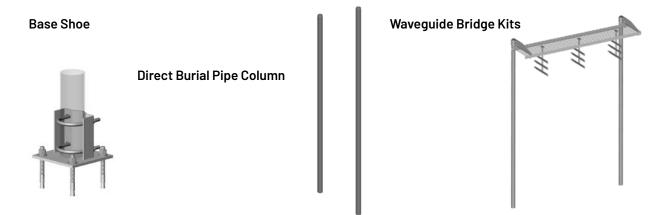
#### Cable Ladder Kits





DESCRIPTION	PART NUMBER
Cable Ladder Kits	
20" Wide, Six Hole Rung, 10 feet	CL-0610-U
20" Wide, Six Hole Rung, 20 feet	CL-0620-U
30" Wide, Nine Hole Rung, 10 feet	CL-0910-U
30" Wide, Nine Hole Rung, 20 feet	CL-0920-U
38" Wide, Twelve Hole Rung, 10 feet	CL-1210-U
38" Wide, Twelve Hole Rung, 20 feet	CL-1220-U

# **WAVEGUIDE BRIDGE COMPONENTS**



DESCRIPTION	PART NUMBER
Base Shoe	
For 3 1/2" OD Pipe, Hardware Included	WB-BS
Direct Burial Pipe Column	
3 1/2" OD x 13' 4"	MF-130
Waveguide Bridge Support Brackets	
24" Wide for 3 1/2" OD Legs	WB-LB24-3
Safety Grated Waveguide Bridge Kits	
24" x 10' Bridge with (2) 15' 4" Direct Burial Posts	WB-K210-B15
24" x 10' Bridge with (2) 13' 4" Direct Burial Posts	WB-K210-B
24" x 10' Bridge with (4) 13' 4" Direct Burial Posts	WB-K410-B
24" x 10' Bridge with (2) 10' 6" Base Shoe Posts	WB-K210-S
Heavy Duty 12" x 10' Bridge with (2) 13' 4" Direct Burial Posts	WB-K110-B-HD
Heavy Duty 12" x 10' Bridge with (2) 10' 6" Base Shoe Posts	WB-K110-S-HD

# TRAPEZE KITS AND Z-BRACKETS

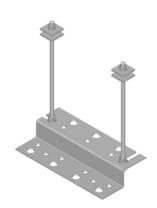
#### Trapeze Kits

#### Arrestor Trapeze Kits

#### **Z-Brackets**







DESCRIPTION	PART NUMBER
Trapeze Kits	
Triple Tee Adjustable, 12" Wide with 3 Rungs	WB-T12-3
Triple Tee Adjustable, 24" Wide with 3 Rungs	WB-T24-3
12" Wide with 1 Rung	WB-TS12
12" Wide with 2 Rung	WB-TD12
24" Wide with 1 Rung	WB-TS24
24" Wide with 2 Rung	WB-TD24
Arrestor Trapeze Kit for 7-16 DIN, Type N or Bolt-grounded Surge Arrestors	
3-Tier, 6-hole Pattern	AT-K306-U
4-Tier, 6-hole Pattern	AT-K406-U
Z-Brackets	
12" Wide with 1 Rung	MT-357-12
24" Wide with 1 Rung	MT-357-24
Vertical Z-Bracket-12" Wide with 6 Holes	ZB-V6
Vertical Z-Bracket-24" Wide with 6 Holes	ZB-V12
Horizontal Z-Brackets	
Coaxial Cable Wall Bracket for 14 Cable Runs	ZB-H8

# **PIPES AND POLE MOUNTS**

Pipe Mounts Kits

Crossover Plates

Pipe-to-Pipe Clamps

Pipes

U-bolts and Hardware



# **PIPE MOUNTS KITS**

**Pipe Mount Kits** MT-219 MTC3055PM35





DESCRIPTION	PART NUMBER
Pipe Mount Kits for 3-1/2" (88.9 mm) Round Tube Faces	
Pipe Mount for 2-3/8" OD (60.3 mm OD) Antenna Mount Pipe	MT-219-H
Pipe Mount for 2-7/8" OD (73 mm OD) Antenna Mount Pipe	МТ-219М-Н
Pipe Mount for 3-1/2" OD (89 mm OD) Antenna Mount Pipe	MT-219L-H
Pipe Mount Kits for 4" (102 mm) Square Tube Faces	
Pipe Mount for 2-3/8" OD (61 mm OD) Antenna Mount Pipe	MTC3055PM2
Pipe Mount for 2-7/8" OD (73 mm OD) Antenna Mount Pipe	MTC3055PM3
Pipe Mount for 3-1/2" OD (89 mm OD) Antenna Mount Pipe	MTC3055PM35

# **CROSSOVER PLATES**

**Crossover Plates** 

XP Series



DESCRIPTION	PART NUMBER
U-bolt Style Crossover Plates	
2 3/8" OD to 2 3/8" OD (60.3mm OD to 60.3mm OD) Round Members	XP-2020
2 3/8" OD to 2 7/8" OD (60.3mm OD to 73mm OD) Round Members	XP-2025
2 7/8" OD to 2 7/8" OD (73mm OD to 73mm OD) Round Members	XP-2525
2 3/8" OD to 3 1/2" OD (60.3mm OD to 88.9mm OD) Round Members	XP-2030
2 3/8" OD to 4 1/2" OD (60.3mm OD to 114.3mm OD) Round Members	XP-2040
2 7/8" OD to 4 1/2" OD (60.3mm OD to 114.3mm OD) Round Members	XP-2540
2 7/8" OD to 3 1/2" OD (73mm OD to 88.9mm OD) Round Members	XP-2530
3 1/2" OD to 3 1/2" OD (88.9mm OD to 88.9mm OD) Round Members	XP-3030
3 1/2" OD to 4 1/2" OD (88.9mm OD to 114.3mm OD) Round Members	XP-3040
4 1/2" OD to 4 1/2" OD (114.3mm OD to 114.3mm OD) Round Members	XP-4040
Universal Round, Joins Range of 2 3/8″ up to 3 1/2″ OD Round Members	XP-R
Crossover Angle	
Crossover Angle, 2 3/8" OD to 2 3/8" OD (60.3mm OD to 60.3mm OD), Kit of 2	
Universal Crossover Angle, 2" OD to 3 1/2" OD (50.8mm OD to 88.9mm OD) to 2" OD to 3 1/2" OD (50.8mm OD to 88.9mm OD), KIt of 2	XA-U

### **CROSSOVER PLATES**

#### **Crossover Plates**

CO Series



### **Crossover Clamps**

CC Series



DESCRIPTION	PART NUMBER
Clamp Style Crossover Plates	
Joins Two 11/2" OD to 3 1/2" OD (38.1mm OD to 88.9mm OD) Round Members	CO-100
Joins Two 2" OD to 5" OD (50.8mm OD to 127mm OD) Round Members	CO-200
Joins 2" OD to 5" OD (50.8mm OD to 127mm OD) to 4" OD to 9" OD (101.6mm OD to 228.6mm OD) Round Members	
Crossover Clamps	
Joins Two 11/2" OD to 2 1/2" OD (38.1mm OD to 63.5mm OD) Round Members CC-100	
Joins Two 2 1/2" OD to 3 1/2" OD (63.5mm OD to 88.9mm OD) Round Members CC-100-6	
Joins 1 1/2" OD to 2 1/2" OD (38.1mm OD to 63.5mm OD) to 2 3/8" OD to 5" OD (60.3mm OD to 127mm OD) Round Members CC-215	
Joins 2 1/2" OD to 3 1/2" OD (63.5mm OD to 88.9mm OD) to 2 3/8" OD to 5" OD (60.3mm OD to 127mm OD) Round Members	CC-215-6

# **PIPE-TO-PIPE CLAMPS**

### Pipe to Pipe Clamps

**BC** Series



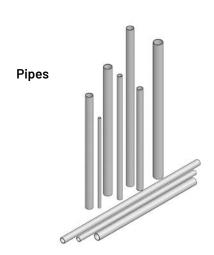


Pipe to Pipe Clamps BC/D Series



DESCRIPTION	PART NUMBER
BC/D Series Pipe-to-Pipe Clamps, Kit of 2	
Joins Two 1 1/2" OD (38.1mm OD) to 3 1/2" OD (88.9mm OD) Round Members, 1/2" x 10" (12.7mm x 254mm) Threaded Rod	BC-20-10D
Joins Two 1 1/2" OD (38.1mm OD) to 3 1/2" OD (88.9mm OD) Round Members, 1/2" x 10" (12.7mm x 254mm) Threaded Rod	BC-30-10D
Joins Two 2 3/8" OD (60.3mm OD) to 5" OD (127mm OD) Round Members, 5/8" x 14" (15.9mm x 0.4m) Threaded Rod	BC-35-14D
Joins Two 4" 0D (101.6mm 0D) to 9" 0D (228.6mm 0D) Round Members, 5/8" x 14" (15.9mm x 0.4m) Threaded Rod	BC-40-16D
BC Series Pipe-to-Pipe Clamps, Kit of 2	
Joins Two 1 1/2" OD (38.1mm OD) to 3 1/2" OD (88.9mm OD) Round Members, 1/2" x 10" (12.7mm x 254mm) Threaded Rod	BC-20-10
Joins Two 1 1/2" OD (38.1mm OD) to 3 1/2" OD (88.9mm OD) Round Members, 1/2" x 10" (12.7mm x 254mm) Threaded Rod	BC-30-10
Joins Two 2 3/8" OD (60.3mm OD) to 5" OD (127mm OD) Round Members, 5/8" x 14" (15.9mm x 0.4m) Threaded Rod	BC-35-14
Joins Two 4" OD (101.6mm OD) to 9" OD (228.6mm OD) Round Members, 5/8" x 14" (15.9mm x 0.4m) Threaded Rod	BC-40-16

### **PIPES**



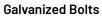
### **Galvanized Schedule 40 Pipes**



DESCRIPTION	PART NUMBER
Pipe	
2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Pipe	MT-651-96
2-3/8" OD x 120" (60.3 mm OD x 3 m) Pipe	MT-651-120
2-3/8" OD x 126" (60.3 mm OD x 3.2 m) Pipe	MT-537
2-7/8" OD x 96" (73 mm OD x 2.4 m) Pipe	MT54696120
2-7/8" OD x 120" (73 mm OD x 3 m) Pipe	MT546120120
2-7/8" OD x 126" (73 mm OD x 3.2 m) Pipe	MT546126120
3-1/2" OD x 96" (89 mm OD x 2.4 m) Pipe	MT54796
3-1/2" OD x 120" (89 mm OD x 3 m) Pipe	MT547120
3-1/2" OD x 126" (89 mm OD x 3.2 m) Pipe	MT-547-126
Galvanized Schedule 40 Pipe	
2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Schedule 40 Pipe	MT651096154
2-3/8" OD x 126" (60.3 mm OD x 3.2 m) Schedule 40 Pipe	MT651126154
2-7/8" OD x 96" (73 mm OD x 2.4 m) Schedule 40 Pipe	MT54696
2-7/8" OD x 120" (73 mm OD x 3 m) Schedule 40 Pipe	MT546120
2-7/8" 0D x 126" (73 mm 0D x 3.2 m) Schedule 40 Pipe	MT-546-126
3-1/2" OD x 126" (89 mm OD x 3.2 m) Schedule 40 Pipe	MTC547126216
Galvanized Schedule 80 Pipe	
2-3/8" OD x 96" (60.3 mm OD x 2.4 m) Schedule 80 Pipe	MT651096218
2-3/8" OD x 126" (60.3 mm OD x 3.2 m) Schedule 80 Pipe	MT651126218
2-7/8" OD x 96" (73 mm OD x 2.4 m) Schedule 80 Pipe	MT546096276
2-7/8" OD x 120" (73 mm OD x 3 m) Schedule 80 Pipe	MT546120276
2-7/8" 0D x 126" (73 mm 0D x 3.2 m) Schedule 80 Pipe	MT546126276
3-1/2" OD x 96" (89 mm OD x 2.4 m) Schedule 80 Pipe	MTC315596
3-1/2" OD x 120" (89 mm OD x 3 m) Schedule 80 Pipe	MTC3155

# **U-BOLTS AND HARDWARE**







DESCRIPTION	PART NUMBER
Galvanized U-bolts	
1/2" x 2-1/2" x 4" (13 mm x 64 mm x 102 mm) Galvanized U-bolt Assembly	GUB-4240
1/2" x 3" x 5-1/4" (13 mm x 76 mm x 133 mm) Galvanized U-bolt Assembly	GUB-4352
1/2" x 3-5/8" x 6" (13 mm x 92 mm x 152 mm) Galvanized U-bolt Assembly	GUB-4356
Galvanized Bolts	
Galvanized Bolt Assembly 3/8" X 1" Grade 5	GB-03105
Galvanized Bolt Assembly 3/8" x 1-1/4" Grade 5	GB-03125
Galvanized Bolt Assembly 3/8" x 1-1/2" Grade 5	GB-03145
Galvanized Bolt Assembly 3/8" x 2" Grade 5	GB-03205
Galvanized Bolt Assembly 3/8" x 2-1/4" Grade 5	GB-03225
Galvanized Bolt Assembly 3/8" x 3" Grade 5	GB-03305
Galvanized Bolt Assembly 3/8" x 3-1/2" Grade 5	GB-03345
Galvanized Bolt Assembly 3/8" X 5" Grade 5	GB-03505
Galvanized Bolt Assembly 1/2" x 1" Grade 5	GB-04105
Galvanized Bolt Assembly 1/2" X 1-1/4" Grade 5	GB-04125
Galvanized Bolt Assembly 1/2" x 1-1/2" Grade 5	GB-04145
Galvanized Bolt Assembly 1/2" x 1-1/2" Grade A325	GB-0414A
Galvanized Bolt Assembly 1/2" x 1-3/4" Grade 5	GB-04165
Galvanized Bolt Assembly 1/2" x 1-3/4" Grade A325	GB-0416A
Galvanized Bolt Assembly 1/2" x 2" Grade 5	GB-04205
Galvanized Bolt Assembly 1/2" x 2" Grade A325	GB-0420A
Galvanized Bolt Assembly 1/2" x 2-1/4" Grade 5	GB-04225
Galvanized Bolt Assembly 1/2" x 2-1/2" Grade 5	GB-04245
Galvanized Bolt Assembly 1/2" x 2-1/2" Grade A325	GB-0424A
Galvanized Bolt Assembly 1/2" x 2-3/4" Grade 5	GB-04265
Galvanized Bolt Assembly 1/2" x 3-3/4" Grade A325	GB-0436A
Galvanized Bolt Assembly 1/2" x 4" Grade 5	GB-04405
Galvanized Bolt Assembly 1/2" x 4-1/2" Grade 5	GB-04445
Galvanized Bolt Assembly 5/8" x 1-1/2" Grade 5	GB-05145
Galvanized Bolt Assembly 5/8" x 1-1/2" Grade A325	GB-0514A
Galvanized Bolt Assembly 5/8" X 1-3/4" Grade A325	GB-0516A

### **U-BOLTS AND HARDWARE**

#### **Galvanized Bolts**

#### **Galvanized Threaded Rod**





DESCRIPTION	PART NUMBER
Galvanized Bolts	
Galvanized Bolt Assembly 5/8" X 2" Grade 5	GB-05205
Galvanized Bolt Assembly 5/8" x 2" Grade A325	GB-0520A
Galvanized Bolt Assembly 5/8" x 2-1/4" Grade 5	GB-05225
Galvanized Bolt Assembly 5/8" x2 1/4" Grade A325	GB-0522A
Galvanized Bolt Assembly 5/8" x 2-1/2" Grade 5	GB-05245
Galvanized Bolt Assembly 5/8" x 2-1/2" Grade A325	GB-0524A
Galvanized Bolt Assembly 5/8" x 3" Grade 5	GB-05305
Galvanized Bolt Assembly 5/8" x 7" Grade A325	GB-0570A
Galvanized Bolt Assembly 3/4" x 2-1/4" Grade 5	GB-06225
Galvanized Bolt Assembly 3/4" x 3-1/2" Grade A325	GB-0634A
Galvanized Threaded Rod	
Threaded Rod Galvanized 3/8" X 8"	GD03800
Threaded Rod Galvanized 3/8" X 9-1/2"	GD03950
Threaded Rod Galvanized 1/2" X 12"	MT-379
Threaded Rod Galvanized 5/8" X 8"	MT-381-8
Threaded Rod Galvanized 5/8" X 18"	MT-382-18

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