

# PIM-GUARD® APPLICATIONS

PROVIDING END-TO-END PIM SUPPORT

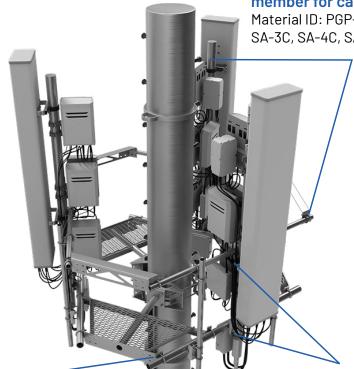
PIM-Guard solutions, reduce PIM where it matters most, the high-risk PIM zone exists in close proximity to the antenna: in front, above, below and even behind it.

The zone is defined as:

- 10' (3M) directly above or below the antenna
- 5' (1.5M) behind the antenna
- 100' (30M) in front of the antenna

Mounting to round member for cable support

Material ID: PGP-series cable support brackets, SA-3C, SA-4C, SA-1C, UHA-3C, FBR-COIL-S



Mounting to angle Iron for cable support

Material ID: UA-3C, SA-3C, SA-4C, UHA-3C, FBR-COIL-S

Supporting fiber, power and coax cables

Material ID:

SSH-411, SSH-1117, SSH-1724, SSH-2630, SSH-3642, SWH-200-10, SA-ISO,

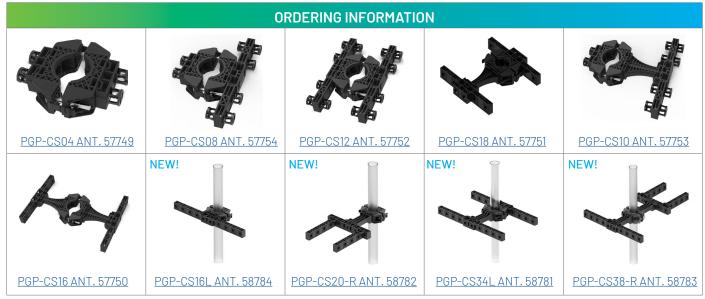
FBR-COIL-S

# PIM-GUARD® ANTENNA AND RADIO CABLE SUPPORT BRACKETS

ANDREW® developed the industry's first all-resin PIM-Guard antenna and 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!

ANDREW has developed several exciting new additions to this popular PIM-Guard family. We created new designs to address wider antennas with expanded 22-inch brackets and also models with reverse orientation for back-to-back RRU mount applications. These new models feature the same PIM-fighting and durable environmental performance of our PIM-Guard line and were specifically designed to address expanded mounting scenarios. They are also AT&T approved and have an assigned item number.





### HELIAX° SnapTak° Adjustable Hangers (kits of 10)

Material ID	Description	Application	Use with	ANDREW Cable series
SSH-411	Polymer snap-in adjustable hangers	Support cables from 4.0mm to 11.0mm in diameter	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C	DFJ-2S123   FJ-1S,2S,3S,4S,6S,8S, 12S   DFJ-2S320   FHBDW-H2   FJ-4MM   DFJ   FJ-2SM, 4SM   FJ-1SM   FSJ1   PTS1   DFJ-12S   RFFT   ATCB-B01 (RET data cable)
<u>SSH-1117</u>	Polymer snap-in adjustable hangers	Support cables from 11.0mm to 17.0mm in diameter	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C	PWRT-212-S   LS2   PWRT-312-SC   PWRT-208-LI   PWRT-210-S   FSJ4   HL4   AL4   LDF4   PWRT-208-S
<u>SSH-1724</u>	Polymer snap-in adjustable hangers	Support cables from 17.0mm to 24.0mm in diameter	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C	HFA206-1 to 6S   HFT410-1 to 4S   PWRT-608-S   PWRT-606-S
SSH-2630	Polymer snap-in adjustable hangers	Support cables from 26.0mm to 30.0mm in diameter	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C	HFT206-8S PWRT-604-S AVA5
SSH-3642	Polymer snap-in adjustable hangers	Support cables from 36.0mm to 42.0mm in diameter	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C	HFT1206   AVA6





#### HELIAX® SnapWrap adjustable hanger (kits of 10)



Material ID	Description	Application	Use with
SWH-200-10	Polymer snap-in adjustable wrap hanger	Bundle multiple cable types and sizes into a 1/2" (12.7mm) to 2" (50.8mm) bundle.	3/4" stamped holes, PGP-series cable support brackets, UA-3C, SA-3C, SA-4C, SA-1TR, SA-1C, UHA-3C



<u>Installation Bulletin</u>

## HELIAX® angle adapter (kits of 10)



Material ID	Description	Application	Use with
<u>UA-3C</u>	Polymer two hole angle adapter	Angle member attachment. Includes torque stop set bolt to ensure proper attachment force. Two 3/4" holes for Snap-in style hangers.	All SnapTak hangers, SWH-200-10



<u>Installation Bulletin</u>

#### HELIAX® standoff adapters (kits of 10)



Material ID	Description	Application	Use with
<u>SA-3C</u>	Polymer three hole standoff adapter	Two sets of slots for round member attachment. 3/8" holes for bolt down attachment. Three 3/4" holes for Snap-in style hangers.	All SnapTak hangers, SWH-200-10



<u>Installation Bulletin</u>



Material ID	Description	Application	Use with
<u>SA-4C</u>	Polymer three hole standoff adapter	Two sets of slots for round member attachment. 3/8" holes for bolt down attachment. Four 3/4" holes for Snap-in style hangers.	All SnapTak hangers, SWH-200-10



<u>Installation Bulletin</u>



Material II	Description	Application	Use with
SA-1TR	Polymer multi- function one hole standoff adapter	Threads into 3/8" & 1/2" bolts & U-bolts or snaps into 3/4" holes. One 3/4" hole for Snap-in style hangers.	All SnapTak hangers, SWH-200-10, 3/8" & 1/2" bolts



Installation Bulletin



Material ID	Description	Application	Use with
<u>SA-1C</u>	Polymer one hole standoff adapter	Round member attachment. One 3/4" hole for Snap-in style hangers.	All SnapTak hangers, SWH-200-10



<u>Installation Bulletin</u>



Material ID	Description	Application	Use with
UHA-3C	Polymer universal three hole standoff adapter	Round member or angle member attachment. Three 3/4" holes for snap-in hangers, or locations to mount three grommets or has a 3/8" holes for threaded rod attachment.	All SnapTak hangers, MCLICK hangers, cable grommets, SWH-200-10



<u>Installation Bulletin</u>

## HELIAX® SnapStak isolator (kits of 10)



Material ID	Description	Application	Use with
SA-ISO	Polymer one hole isolator for snap- in adjustable hangers	Snaps in between hanger and mounting surface, and between stacked hangers to remove metal to metal contact.	3/4" stamped holes, all SnapStak <sup>®</sup> hangers

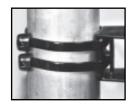


<u>Installation Bulletin</u>

#### **Banding**



Material ID	Description	Application	Use with
CB-12-16LH CB-12-18LH CB-12-27LH	Heat-stabilized weather resistant acetal cable banding, 1/2 in x 16 in, 18 in and 27 in length with attached locking head, 50, 100, 25 pcs	Round member or angle member attachment for polymer angle adapters and standoffs	SA-3C, SA-4C, SA-1C, UHA-3C





Material ID	Description	Application	Use with
<u>CB-12-50</u>	Cable banding, bulk, 1/2 in x 50 ft Reel	Round member or angle member attachment for polymer angle adapters, standoffs and excess cable management coilers	All Standoff adapters and FBR-COIL-S





Material ID	Description	Application	Use with
<u>CB-LH-25</u>	Locking heads for cable banding CB-12-50, 25 pcs	Installation of CB-12-50 cable banding	CB-12-50
Material ID	Description	Application	Use with



Material ID	Description	Application	Use with
<u>CB-IT</u>	Installation tool for cable banding CB-12-50 and locking heads CB-LH-25	Installation and trim cutting of cable banding CB-12-50	CB-12-50 and CB-LH-25

#### Excess cable management



Material ID	Description	Application	Use with
FBR-COIL-S	Engineered plastic fiber coiling reel	Round member or angle member attachment. Accommodates 16' (5M) of excess 7mm fiber.	5-7mm fiber cables



**Installation Bulletin** 

Please contact your local ANDREW representative or email <a href="mailto:steelproducts@andrew.com">steelproducts@andrew.com</a> for more information.