ANTENNA EXPERTS

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Model # AC12-650 600 – 700 MHz. 12 dBi. Gain

FIBERGLASS HIGH GAIN COLLINEAR ANTENNA – INSTALLATION MANUAL

NOTICE:

Installation, maintenance or dismounting of the antenna system requires qualified and experienced personnel. Antenna Experts antenna Installation instructions have been prepared and are meant for skilled personnel only.

Antenna Experts disclaims any liability or responsibility as a result of improper or unsafe installation practices.

MATERIALS:

Following materials are used for the fabrication of Antennas and its accessories.

Support Pipe:	6063T6 Aluminum.
Radiating Elements:	Brass
Radome:	Fiberglass
Mounting Hardware:	All Marine Grade Stainless Steel.
Fasteners:	All Marine Grade Stainless Steel.
Connector:	Silver-plated brass body & Gold plated pin.
Insulator:	Nylon.

PACKING LIST :

Sl. No.	ITEM/DESCRIPTION	QUANTITY
1.	Antenna Fiberglass Collinear in two (Upper and Lower) sections.	1 Each.
2.	LOWER SUPPORT ARM- Grounded Mounting Assembly with 1.5 Inch diameter, 4.5 Feet long Aluminum Pipe.	2 Nos.
3.	UPPER SUPPORT ARM- Insulated Mounting Assembly with 1.5 Inch diameter, 4.5 Feet long fitted with Nylon Rod.	1 Each.
4.	Aluminum Crossover plates	9 Nos.
5.	M8 “U” Bolts with Nuts and lock washers.	36 Nos.
6.	Installation Manual.	1 Each.
7.	Test Report.	1 Each.

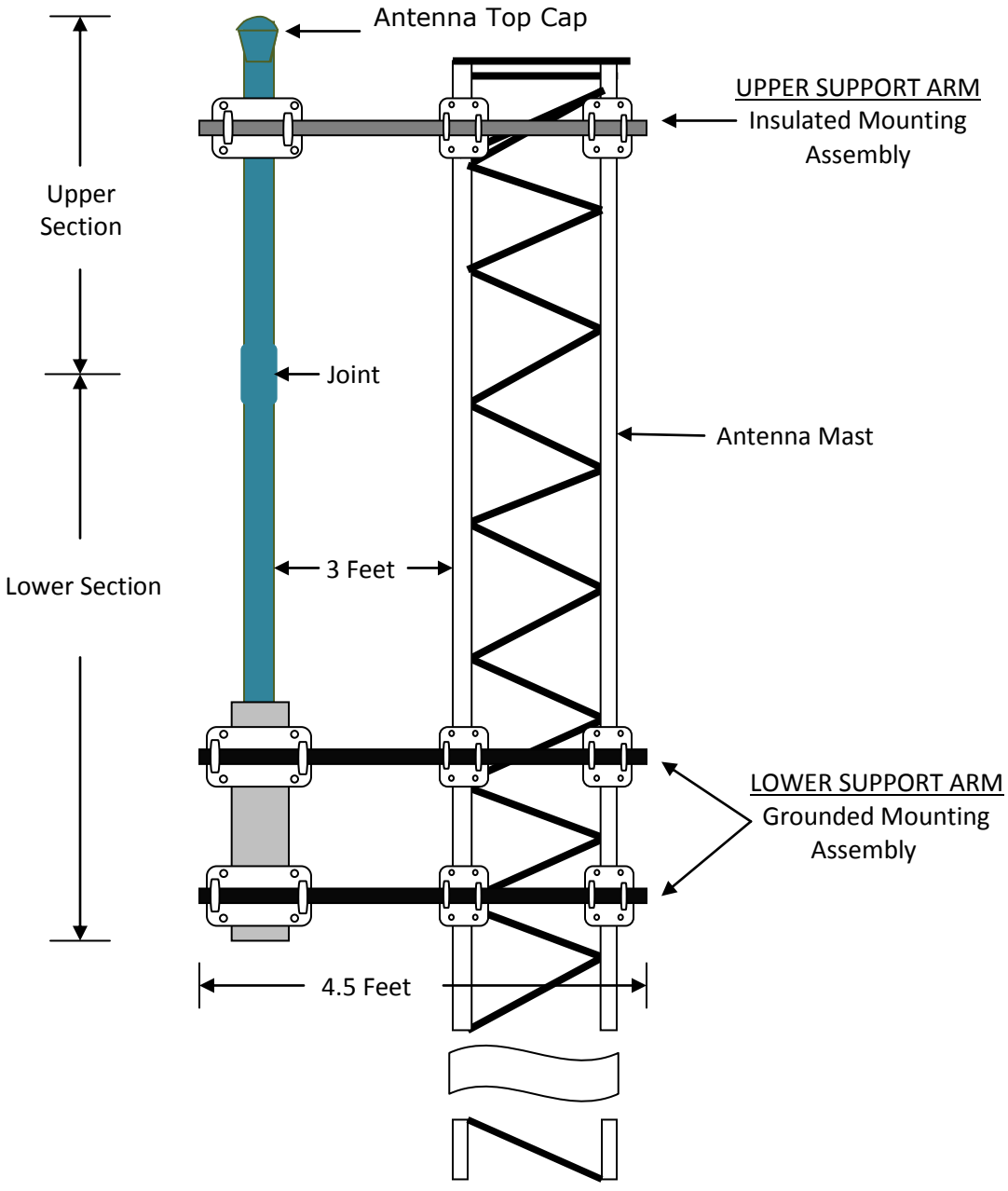
INSTALLATION INSTRUCTIONS:

1. The antenna is supplied in two sections for ease of handling and shipping.

2. Unpack the Collinear antenna and mounting hardware from the packing box and remove the plastic sleeve/tube from the fiberglass enclosure.

3. A serial number sticker is provided at the bottom of lower section and the top of upper section of each antenna. Before attempting to assemble an antenna, make sure that the lower and upper sections of the antenna bear the same serial number markings on both lower and upper sections of the antenna.

Installation Diagram of AC12-650 Collinear Antenna



4. The TOP of lower sections of antenna having external threads and the bottom of upper section having internal threads. The external thread is protected with a white thread protecting nylon cap during handling and transit. Remove the WHITE CAP to prepare for antenna assembly.

5. For assembling the antenna, align the thread portion of upper and lower section of the antenna and tighten the joint to complete the antenna assembly.

6. Seal the fiberglass antenna joint against moisture ingress with a sealing tape.

7. The antenna is designed to mount the antenna on the side of a tower.

8. The side mounting assembly is designed for mounting the antenna on triangular tower having round leg of 1.5-2.0 Inches (38-52 mm) in diameter.

9. Nine crossover plates and 36 Nos. of M8 “U” bolts are supplied along with the antenna.

10. Assembled the crossover clamps and fix them on the upper and lower supports arm as shown in the drawing.

11. Three-crossover plate clamp sets should be fixed on each Grounded Support Pipe and Three-crossover clamp set should be fixed on Insulated Support Pipe for attachment of antenna to the tower.

12. Install the Collinear Antenna on the side of the tower, by using two Grounded Mounting Assembly and one Insulated Support Assembly, supplied with the antenna.

13. **Do not install the antenna other than the recommended installation procedure.**

14. Take extreme care during Installation that the Collinear Antenna should be approximately 3 FEET away from tower.

15. When the installation of the antenna has been completed, it is necessary to ensure that the installation instructions have been followed in all aspects.

16. Connect the antenna feeder cable to the N-Female connector (provided at the bottom) of the Collinear Antenna and secure it with cable ties.

17. Seal the connector against moisture ingress with a sealing tape.

18. Make sure that the frequency of the Transmitter / Receiver should be within the frequency band marked on the antenna. Do not operate the antenna other than the specified frequency band of the antenna.

19. Take VSWR reading by using through-line RF Power meter. The VSWR should never exceed 1:1.5.

20. Keep the record of VSWR measurements for future reference.

21. Tighten all nuts and bolts.