

## Securing and Electrical Bonding of Flex Cables in Panel Antennas

### Securing

It is vital that runs of flex cable be secured firmly at frequent intervals. This is done to prevent mechanical damage from cables rubbing against each other and tower members.

### Electrical Bonding

Unjacketed cable sections must also be electrically bonded to nearby tower members and other cable runs.

### Precautions

The following precautions must be taken when securing and bonding unjacketed cables:

- Care must be taken not to crush or deform the outer conductor of the cable.
- Tower paint must be scraped to ensure good electrical contact for the bond. The scraped area may be re-painted after the electrical bond is made.

### Procedure

To prevent mechanical damage, cables should be secured and bonded any time they pass within 4 inches of each other or a tower member.

Cable runs longer than the following should be secured and bonded. These are approximate; secure and bond to tower members as actually available.

Cable Size	Run Length	* Secured About Every
7/8"	6 ft.	4 ft.

Various hangers and clamps are available from various sources for securing cable and achieving a good electrical bond. Shively will supply cable clamps ("butterfly clamps") with your antenna in a quantity based on our best guess of your needs - but every tower and installation is unique! Therefore, additional cable clamps as required and round and angle tower member clamps should be supplied by your rigger.

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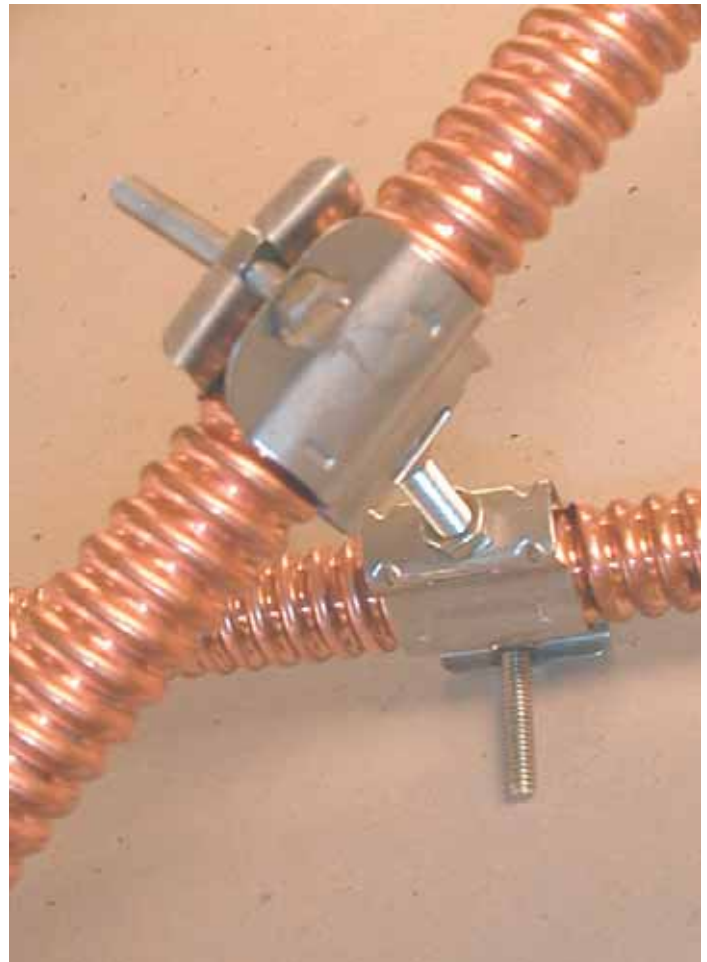


Figure 1. Recommended Cable-to-Cable Electrical Bonding Arrangement  
NOTE: not all parts supplied by Shively.

### NOTE

Shively will not be responsible for installations that don't meet our recommendations.

- **Cable to Flat, Round, or Angle Tower Member:** Use hangers and hose clamps, as shown on the enclosed sheet, to secure and electrically bond the cable.
- **Cable to Cable:** Use two cable clamps and a full-threaded bolt or threaded rod with nuts, as shown in figure 1 of this sheet, to secure and electrically bond the cables together.

\* Recommended per flex cable manufacturer.

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A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA

(207) 647-3327

1-888-SHIVELY

Fax: (207)647-8273

An Employee-Owned Company

www.shively.com

sales@shively.com

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