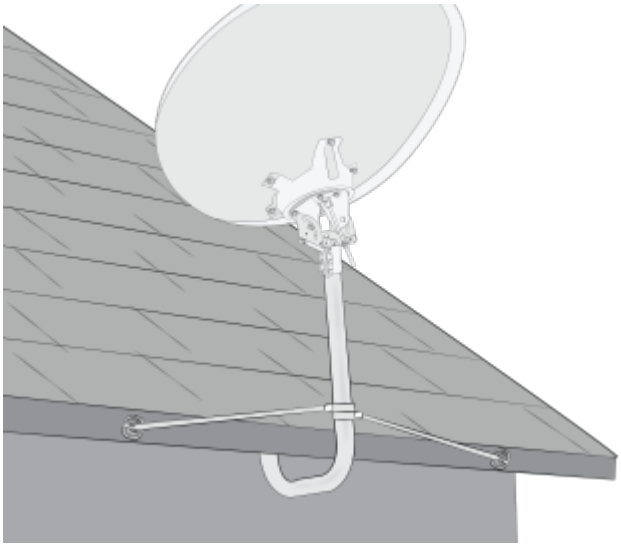
Under-Eave “J” Roof Mount Job Aid

Preparing for an “J” Under-eave Roof Mount

Surfaces

The approved locations for “J” under-eave mounts are exposed rafter eaves with an angled or flat roof.



Structural Elements

Exposed rafter

Important considerations

DANGER! Locate power lines before you start the installation. These include overhead and underground power lines, electric lights, and power circuits.

- Only use Viasat-approved under-eave mounts listed in the *Viasat Approved Materials List* job aid

Other Considerations

- The ground block must be within 20 feet of the NEC approved ground
- The total cable run from the modem to the TRIA must be less than 150 feet
- All antennas must be located at least 20 feet from any overhead power lines and 3 feet from any standard power circuit or electric light
- Position the mount so that the bottom of the reflector is at least 4′ above any walking surface

Mounting Materials

The Technician must provide the following materials:

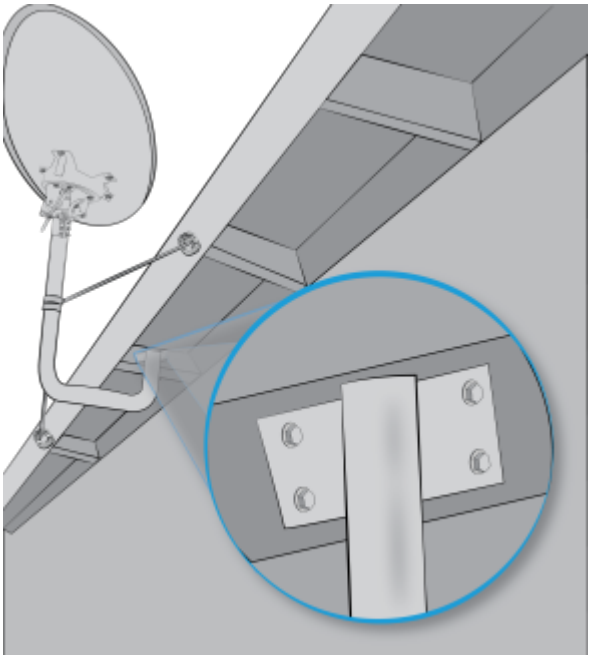
- The “J” open-rafter mount – listed in the Viasat Approved Materials List job aid

Installing a “J” Open Rafter Mount

Reminder

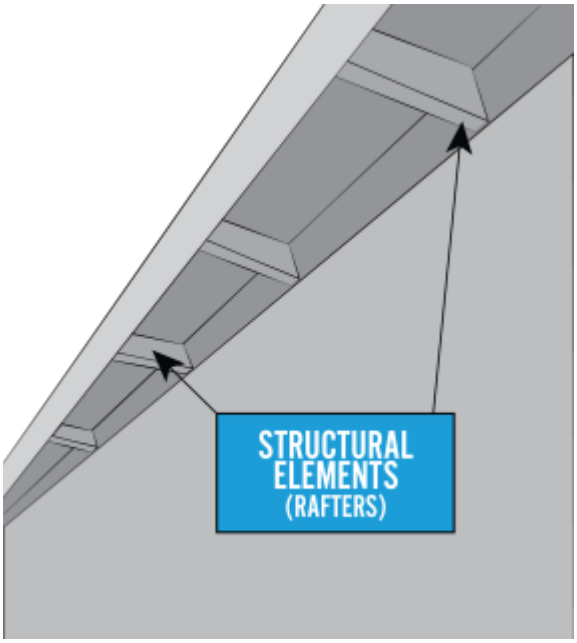
The “J” open rafter mount is used with an exposed rafter eave with an angled or flat roof.

Always follow the manufacturer’s installation instructions, included with the mount.



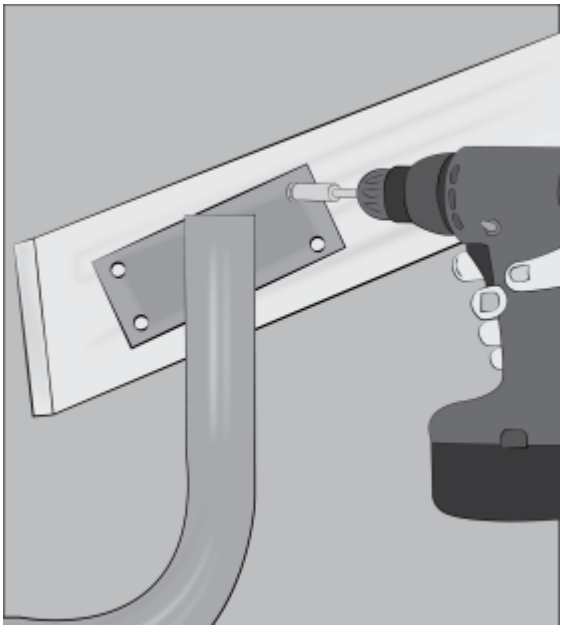
Locate the structural elements (rafters) that will place the footplate in position to meet all of the appropriate considerations listed above. Do not forget to allow room for the adjustable monopoles.

Note: The rafter/structural elements will be visible.



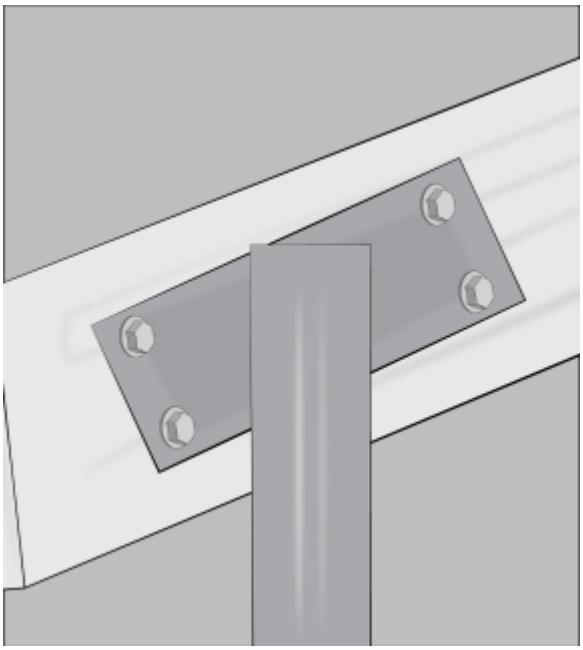
Hold the footplate in the center of the rafter and mark the location for the top-left corner hole. Remove the footplate and predrill a 1/8 inch hole on the mark.

Secure a 5/16 X 2 inch lag screw through the top-left corner hole of the footplate and the rafter. Leave the lag screw loose enough to level the footplate.



Use a level to level the mast tube.

Mark and predrill the remaining 3, 1/8 inch holes; one in each of three remaining outside corners.



Correctly align the footplate over the 1/8 inch holes in the rafter. Fill the holes with silicone-based sealant.

Install a 5/16 X 2 inch flanged lag screw in each of three outside corner holes.

Verify that the footplate is level and securely tighten all the screws.

Adding the Monopoles

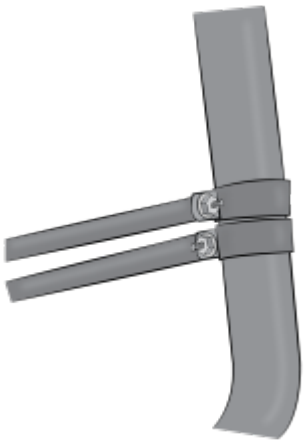
The installation kit provides the adjustable monopoles that are required on all mounts and sloped roof mounts, except the low profile “stub” mount. These are the only Viasat-approved monopoles; do not use others.

Loosen all of the 5/16 inch joint hardware.

Caution! Edges may be sharp; gloves are recommended.

Point the collar flanges down, so that the monopoles stretch downward along the mast tube.

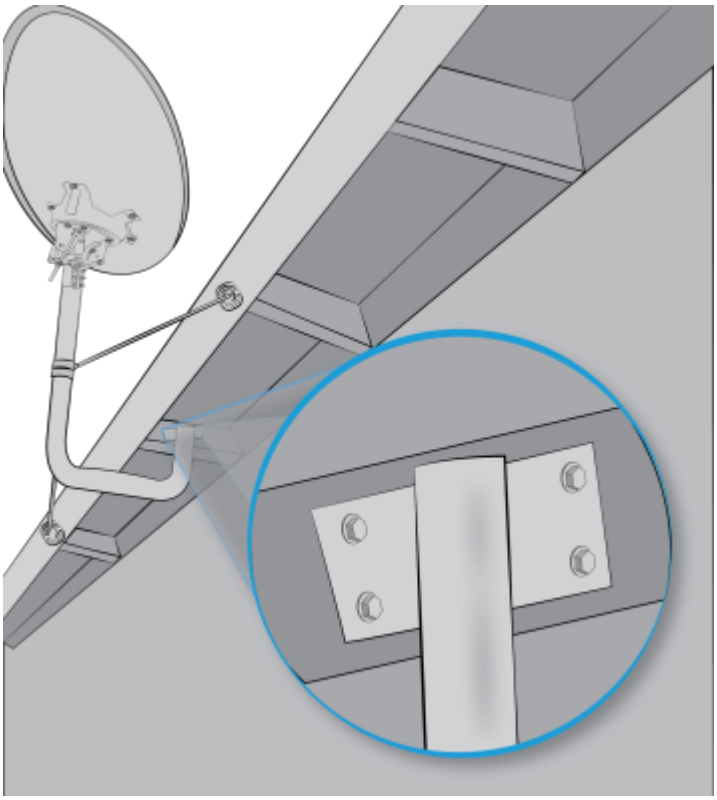
Slide each collar down just enough for proper placement of the monopole feet in the rafter (approximately 6 inches).



Using the same technique and process as the footplate, attach the foot of each adjustable monopole to the structural element (rafter) using two 5/16 x 2-inch lag screws per foot.

Install the monopoles on opposite sides of the mast tube.

Remember to add silicon-based sealant to the holes before adding the lag screws.



Tighten all the 5/16 inch hardware joints.

Complete final mast tube leveling after installing monopoles and tighten all mount nuts and screws.

Once the mast tube is level, you are ready to attach the antenna.