

13MM-SM04 INSTRUCTION MANUAL

Installation Kit Parts List

- 1x 580mm Elbow Mast with 3x 5/16" bolts, 6x washers, 3x spring washers and 3x nuts.
- 1x Swivel foot mount (Clevis bracket).
- 2x Adjustable stay bars with 4x 10G x 16mm 5/16" Hex Self Tapping Metal screws.
- 4x 14G x 65mm 3/8" Hex Type 17 Timber Screws with
- 4x Cyclone Washers with integrated seal.
- 1x Cable grommet

Before Starting

Take the time to read these instructions carefully in conjunction with the illustrations to ensure a thorough understanding of the procedures.

Warning

The SM04 relies upon the strength of the purlin-rafter joint to transfer the wind load to the building structure. Therefore, joints near the mast must be inspected to ensure they are suitable and structurally sound.

Safety Warning

Dangerous live electrical cables may be behind roof sheets/building cladding. Please ensure an earth leakage protection safety device is used when drilling into any surfaces. Please ensure appropriate personal protective equipment is used during your installation. This may include but is not limited to gloves, goggles, safety boots and a harness when working at heights.

Positioning the Mount

In consultation with the householder, choose a location that will allow the antenna a clear view to the transmitter. Position the stay bar on the high or low side of the mast. The smaller angle between the braces should be no less than 60 degrees or greater than 120 degrees. See Fig 1 and Fig 2.

Fig. 1 Alternate mast arrangements for Metal Roofs

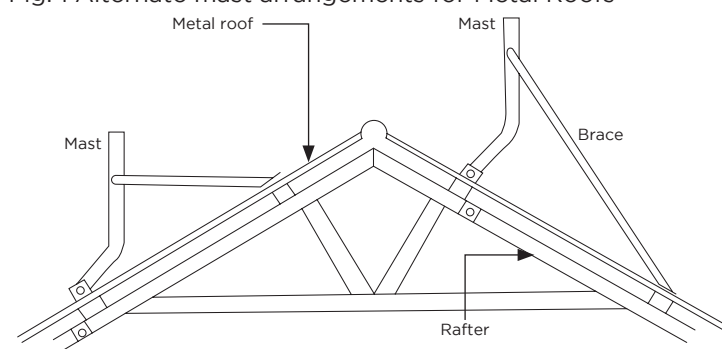
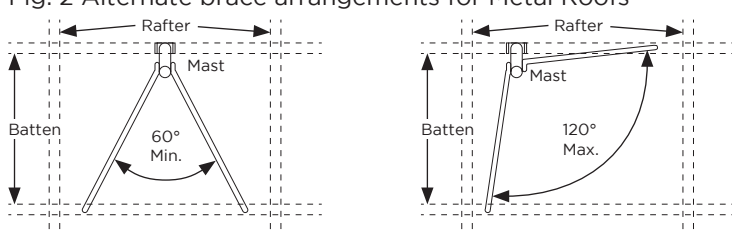


Fig. 2 Alternate brace arrangements for Metal Roofs

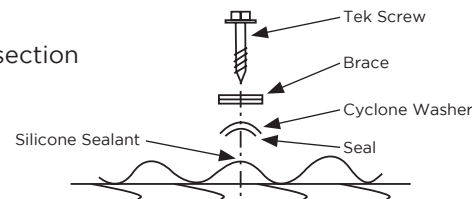


Swivel Foot

Remove a screw from the batten at the swivel foot location and loosely fix one end of the foot with a Cyclone screw. See Fig 3.

Using the foot as a template, use a self-tapping Cyclone screw in the other mounting hole. After installing the second Cyclone screw, tighten both screws so that they are firm against the roof corrugations without distorting them. Drill a 10mm hole adjacent to the foot to locate the cable feed-through grommet.

Fig. 3 Typical Cross section of Fastening



Curved Mast

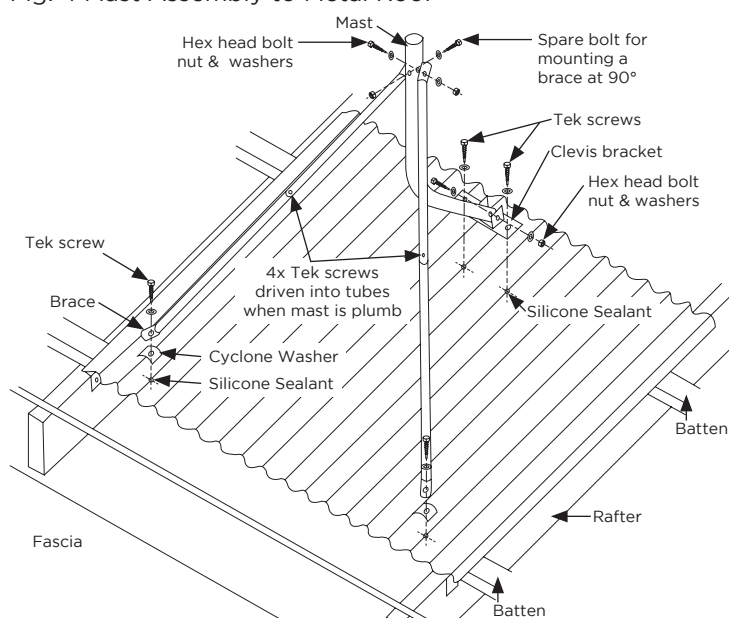
Secure the curved mast to the swivel mount with a 5/16 bolt, two washers, spring washer and nut provided.

Stay Bars

Assemble the adjustable stay bars to the mast using the balance of 5/16 bolts and associated hardware. Locate the opposite ends to the selected anchor points, realigning the flats so that they follow the roofline. Remove the screws from the battens and replace them with the remaining Cyclone assemblies as per Fig 4.

Note: Please ensure the large diameter stay bar is connected to the mast. The smaller diameter stay bar must be connected to the roof to prevent water ingress between the two bars. Please ensure the weep holes are on the inside of the upper stay bars and on the underside of the lower stay bars to allow correct drainage.

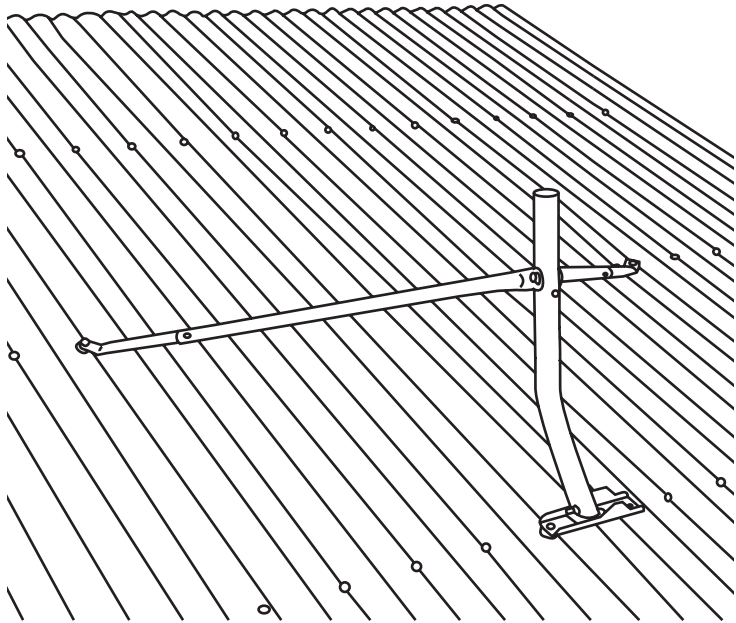
Fig. 4 Mast Assembly to Metal Roof



With mast vertical secure the stay bars with 2 x 10G x 16mm 5/16" Hex Self Tapping Metal screws per stay bar as indicated in Figure 4.

Note: Although the Cyclone washer supplied with integrated seal will provide a high degree of waterproofing if correctly assembled, additional protection by way of a suitable sealant is recommended. Silicone may be applied under the washers before tightening. If using a cyclone washer under clevis foot mount bracket, this can cause instability on some roofs. The mast installation is now complete, and the antenna can be mounted.

Double-check all fasteners and seals before leaving the roof area.



Optional Accessories

- 13MM-DUOCLEAT Duo Cleat – For use in moderate
wind areas
- 13MM-BK01 Batten Kit – For use in high wind areas

If installing the SM04 using either the Duo Cleats or Batten kit, please complete the install following the instructions supplied with the accessories.