



Matchmaster

For the Best

13MM-SM22 INSTRUCTION MANUAL

Products

13MM-SM22 1.5m Tripod Mount with Stay Bars

Optional Accessories

13MM-BK01 Batten Kit for High Wind Areas
(Sold separately if required)

13MM-DUOCLEAT Duo Cleat for Corrugated Metal Roofs
(Sold separately)

Installation Site

The selected roof installation location must be carefully inspected to ensure it is structurally sound and in good repair before installation. Please also ensure the roof location chosen is suitable for optimal signal and accepted by the customer before installation.

Warning

The SM22 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.

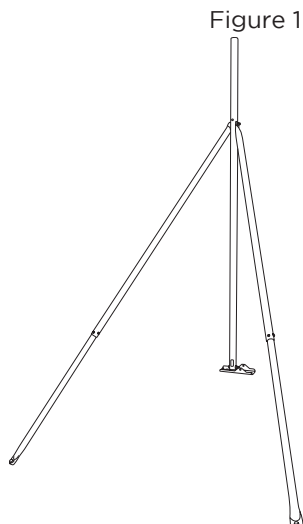
Installation Limitations

The SM22 mount is only designed for use on standard corrugated cladding profiles like CUSTOM ORB®. For different profiles such as TRIMDEK® or SPANDEK®, a cyclonic metal batten kit must be used to fasten at the anchor locations (BK01 sold separately).

The SM22 is not suitable for tiled roofs or light gauge metal frame roofs.

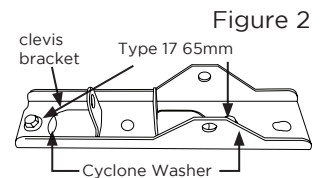
Mast and Stay Arms

The SM22 is a fixed height 1.5m mast. The stay bars are designed to run up or down the roof from the main mast and have a maximum allowable install length of 1800mm. See figure 1.



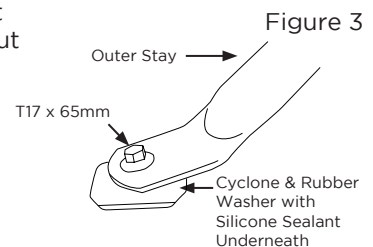
Installation Guide

1) After selecting a suitable roof position and confirming with your client, first install the clevis bracket by removing any existing roof screws, apply roofing silicon to the penetration points, penetrations should only be through the ridges of the roof sheeting, seat the two cyclone washers and then fasten down the clevis bracket using two supplied 14G x 65mm 3/8" Hex Type 17 timber screws. See figure 2.

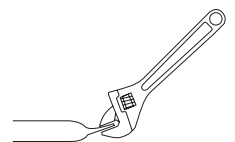


2) Next, extend out and attach the flattened ends of the telescoping stay tubes to the roof ridges, first placing some roofing silicone sealant underneath the bottom face. Again, use the Type 17, 65mm wood screws and cyclone and rubber washers supplied, lightly tighten down so the stay bars can rest against the roof surface without stressing the screw point.

Ensure the weep holes are on the underside of the stay bar. See figure 3.

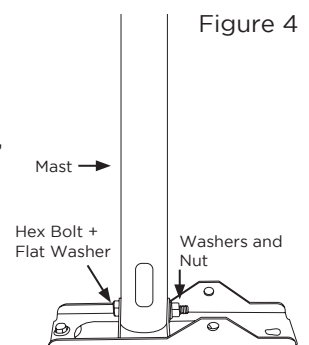


Note: The flattened ends of the stay bars can be adjusted to suit the installation angle by simply bending with an appropriate tool like a vice grip or adjustable wrench.

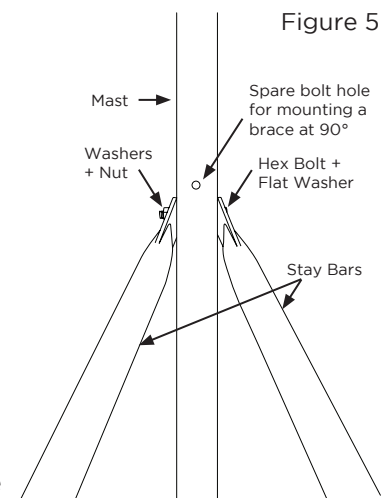


Warning: If fixing to metal batten roofs (0.42-1.5mm thick), use either the duo cleats (13MM-DUOCLEAT sold separately) or use cyclonic metal batten kit (13MM-BK01 sold separately) and fasten, replacing all Type 17, 65mm wood screws with Buildex® M6.5-12 x 55 Roof Zips® screw fasteners.

3) Seat the bottom of the 1.5m mast into the clevis bracket and lock it into place using a 5/16" hex bolt with hex nut, two flat washers and a spring washer. Gently tighten, making sure not to overtighten and crush the mast. See figure 4.

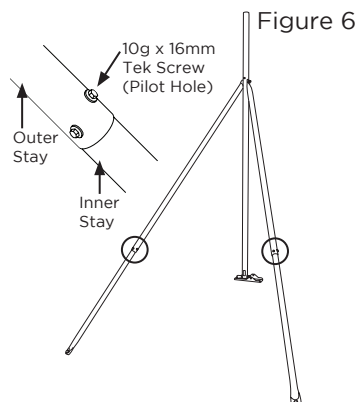


4) While stabilizing the mast with one hand, lift one of the stay bars into place (make sure the flattened ends have also been bent to a suitable angle to fit flush against the mast surface), then attach to the mast using a 5/16" hex bolt with a flat washer, now lift the second stay bar into position and seat over the bolt end, gently fasten in place by using a flat washer, a spring washer and nut. Firmly tighten into place, ensuring not to overtighten and crush the mast tube. See figure 5.



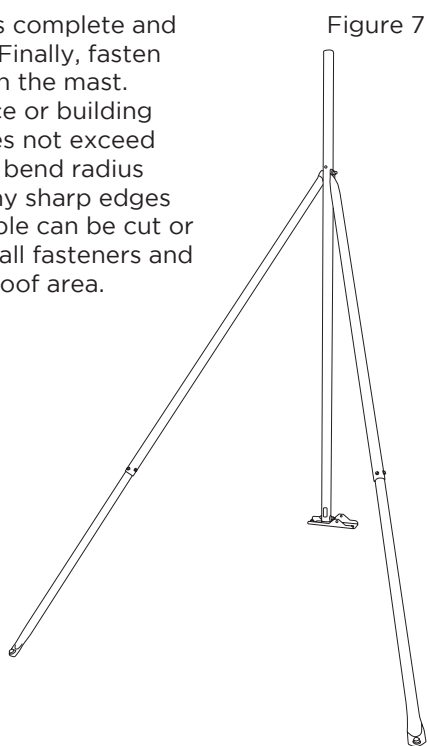
5) Tighten the Type 17 roof screws to secure the stay bar bases to the roof. See figure 3. The installation is nearly complete, and the mount should look as in figure 1.

6) Using a spirit level (magnetic levels make the job easier). Adjust the mast by pushing it into place until it is plumb. Now secure the two stay bars using the supplied 10g x 16mm TEK® screws by drilling into the pilot holes of the stay bar overlap. There are two fastening points on each stay bar. See figure 6.



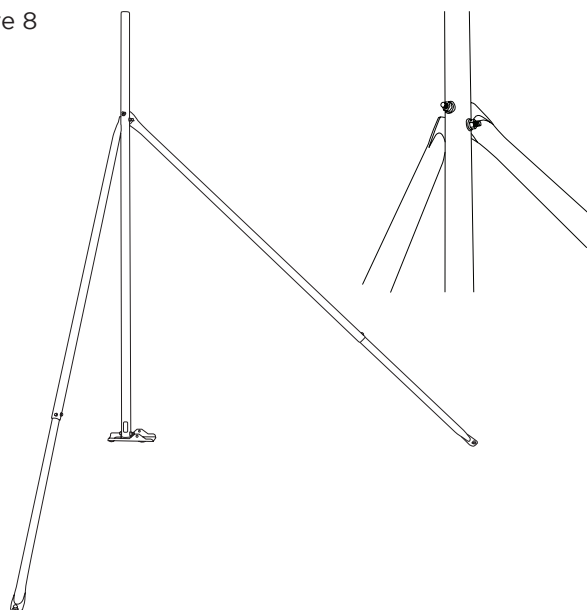
7) Assemble your antenna per the manufacturer's instructions, connect the antenna cable and fasten it to the top of the mast tube, ready for testing. The mast allows for cable to be run either outside the mast, or through the mast centre. If running through the mast centre, please run the cable through the pre cut hole near the base of the mast, not out the bottom of the tube onto the clevis bracket where it could be pinched and damaged.

8) The mast installation is complete and should look like figure 7. Finally, fasten the remaining cable down the mast. Feed it into the roof space or building entry point. Ensure it does not exceed the manufacturer's cable bend radius or expose the cable to any sharp edges upon entry where the cable can be cut or damaged. Double-check all fasteners and seals before leaving the roof area.



Please note that the mount can have the stay bars installed at a 90 degree angle if required, there is an additional predrilled bolt hole in the mast and an extra bolt with washers and nut provided for this method of install. Please ensure the stay bars are both fastened to the outside face of the mast for maximum strength. See figure 8.

Figure 8



Optional Accessories

59MM-SM25	Gen 3 ISP Dish Pole Adaptor
13MM-DUOCLEAT	Duo Cleat - For use in moderate wind areas
13MM-BK01	Batten Kit - For use in high wind areas

If installing the SM22 with SM25 adaptor, Duo Cleats or Batten kit, please complete the install following the instructions supplied with the accessories.