

West Coast Weather Vanes

Deck or Wall Bracket Installation Instructions

Note: The use of bolts, washers and nuts is the most secure method for installation. Appropriate sizes for your specific installation requirements are available at hardware stores. Steel screws are provided where the use of bolts, etc. are inappropriate. Make sure screws are securely attached to the framing.

Tools and supplies recommended for deck or wall mounting your weather vane:

- Electric drill with 1/4 inch drill bit for bolts (or 9/64 inch for screws)
- Level
- Medium size slotted screwdriver
- Small Crescent wrench
- Flashing Caulk
- Heavy grease (included with your weathervane)
- Compass

1. Place bracket on surface to which it will be attached. Using a level, check to make sure mounting tube is vertical.

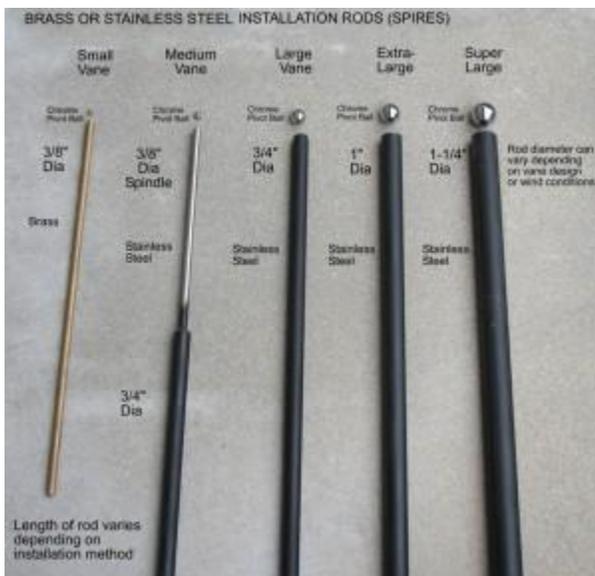
Mounting with Bolts

- Drill one 1/4" brass bolt test hole. Make sure hole is located in a place free of impediments yet has enough structural support to firmly secure the bracket and weather vane.
- Drill remaining bolt holes. Slip brass bolts in place. Slip on washers and thread nuts.

Mounting with Screws

- Drill one 9/64 inch test hole to determine if there is enough structural material to firmly attach the bracket and weathervane.
- Drill remaining screw holes.

2. Insert spire (thickest diameter end if tapered) into Wall or Deck Bracket and make sure it reaches the bottom of the tube. Then check to make sure it is vertical using the level. If it is not, you will need to adjust the bracket using a shim, or adjusting by tightening or backing off the screws or bolts to get it plumb. The spire (vertical installation rod) must be vertical for the new weather vane to spin freely. (Note: the rod itself does not turn, only the weathervane sculpture piece). **NEVER TUG OR PULL ON SPIRE (vertical installation rod) OR BRACKET.**



**Different Diameter Weathervane Spires
(Vertical Installation Rods)**

Spires (vertical installation rods):

West Coast Weather Vanes offers different diameter installation rods. The diameter selected depends on the following:

- the weathervane's size
- the sculpture piece design
- the potential for high winds

Relatively heavy sculpture pieces (3-D weather vanes, for example) may require a larger diameter installation rod than their swell bodied or silhouette style counterparts.

Finally, if the weather vane is to be installed in a high wind location, a mountain top or directly along the coast, we can upgrade the weather vane to a bigger diameter rod to help compensate for occasional increased wind load.

3. Caulk around secured spire (vertical installation rod) to seal the hole.

4. Assemble ring, globes and directionals on spire (vertical installation rod).

Optional: Slide brass ring on spire. Allow it to slide down as far as it can go. Do not tighten yet. If you skip this step and do not add the brass ring, the larger copper globe can act as a semi-flashing at the top of the Wall or Deck Bracket tube. (see below)



- Slide on large globe. Allow it to gently slide down as far as it will go. *Do not tighten yet.*
- Slide on interlocked brass directionals. Allow to gently slide down until they rest lightly on top of globe without denting. *Do not tighten yet.* (See photos below for correct directional assembly)



Overhead view of interlocking directionals



Up Close Detail of interlocking directionals

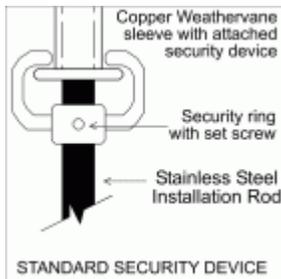
- If rod is not narrower at the top, slide on second brass ring. Allow to slide to bottom of rod. *Do not tighten yet.*
Note: If rod is a smaller diameter at the top, disregard this step.
- Gently slide on smaller copper globe. *Note: If installed rod is narrower at the top, your small copper globe will have larger and smaller diameter holes drilled into it. Position globe so larger holed end slides on first. The small hole will come to rest where the rod flares out.*

Note: Some weathervane designs come with the smaller copper globe attached to the sculpture piece. If this is the case with yours, skip last two steps above.

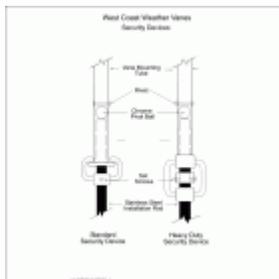
5. Coat with grease the section of the spire (vertical installation rod) that will be covered by the vane sculpture piece. (Use small tub of grease included with weathervane).

6. Optional Security Device Assembly: Skip this step if your vane does not have a security device

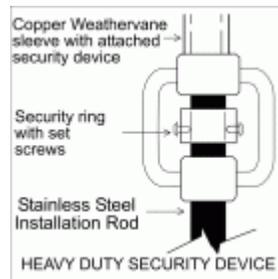
Note: The security device is physically attached to the weathervane sculpture piece and must be added at the time the weathervane is being constructed. It cannot be added after the weathervane has shipped.



Standard Security Device Detail



**Security Device
Standard vs Heavy Duty**



Heavy Security Device Detail

Standard Security Device Assembly:

- Locate security ring with set screws, in small parts box.
- Before sliding the weathervane over the vertical installation rod, align the security ring just below the copper sleeve that extends down out of the weathervane sculpture piece. Make sure security ring's copper arms are positioned just above the ring soldered to the bottom of the copper weathervane sleeve. (see above)
- Insert ONE chrome pivot ball into the mounting tube at the base of the weathervane sculpture piece, as illustrated above center. Note: The remaining steel balls are spares in case you drop the first one during the installation. Hold your finger over the base of the tube containing the steel ball to keep it from falling out and slide the vane over the top of spire (vertical installation rod) and gently slide sculpture down. *Note: If your stainless steel rod is beveled and reduced from 3/4" (1.9 cm) to 3/8" (.95 cm) for the top 10" (25 cm), check to see that the vane clears the beveled section of the spire. If it does not, add a second ball bearing and check again.*
- Tighten security device set screws.
- Spin weather vane to see that it is not rubbing on the security ring.
- Skip to Step 8

Heavy Duty Security Device Assembly:

- Locate security ring with set screws, in small parts box.
- Before sliding the weathervane over the vertical installation rod, align the ring inside the two security device copper loops.
- Insert ONE chrome pivot ball into the mounting tube at the base of the weathervane sculpture piece, as illustrated above. *Note: The remaining steel balls are spares in case you drop the first one during the installation.* Hold your finger over the base of the tube containing the steel ball to keep it from falling out and slide the vane over the top of spire (vertical installation rod) and gently slide sculpture down. *Note: If your stainless steel rod is beveled and reduced from 3/4" (1.9 cm) to 3/8" (.95 cm) for the top 10" (25 cm), check to see that the vane clears the beveled section of the spire. If it does not, add a second ball bearing and check again.*
- Tighten security device set screws.
- Spin weather vane to see that it is not rubbing on the security ring.
- Skip to Step 8

7. Insert ONE steel ball into the mounting tube at the base of the weathervane sculpture piece. (The remaining steel balls are spares in case you drop the first one during the installation.) Hold your finger over the base of the tube containing the steel ball so it does not fall out, transfer the vane over the top of spire (vertical installation rod). Then gently slide sculpture down over spire. *Note: If your stainless steel rod tapers from 3/4" (1.9 cm) to 3/8" (.95 cm) on the top 10" (25 cm) of your rod, check to see that the vane clears the flared section of the spire. If not, add a second ball bearing and check again.*

8. Now slide harness components detailed in #4 above into place and tighten with a screwdriver. See image below for suggested vertical proportions. Use your compass to orient the brass directional letter N to true north. Depending on how accurate you want your Directionals to be, please see our [Magnetic Declination webpage](#) for details on how to orient the directional letters.



Correct Harness Assembly & Placement
Directionals are interlocked



Incorrect Harness Assembly & Placement
Directionals *are not* interlocked