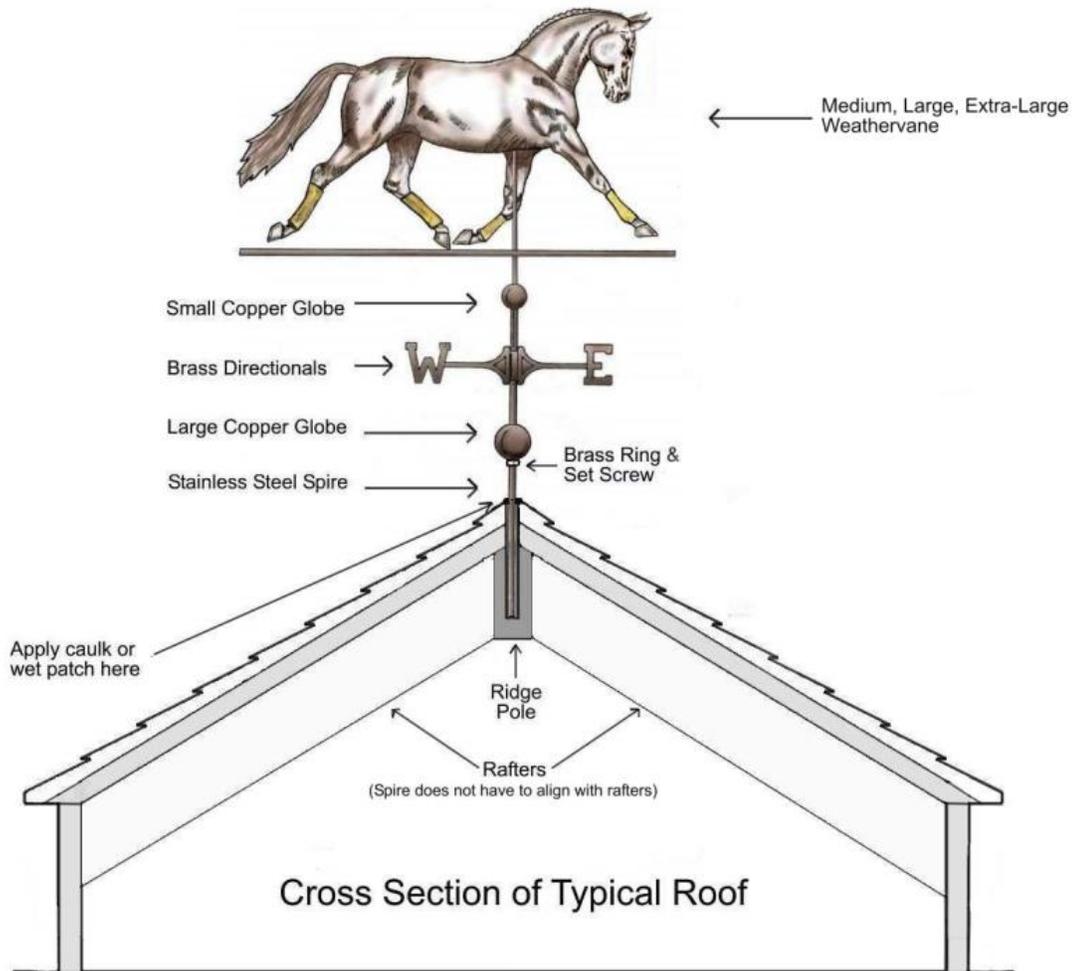


# West Coast Weather Vanes

## Basic Drilled Installation Instructions for Medium, Large and Extra-Large Weathervanes

### BASIC DRILLED INSTALLATION METHOD



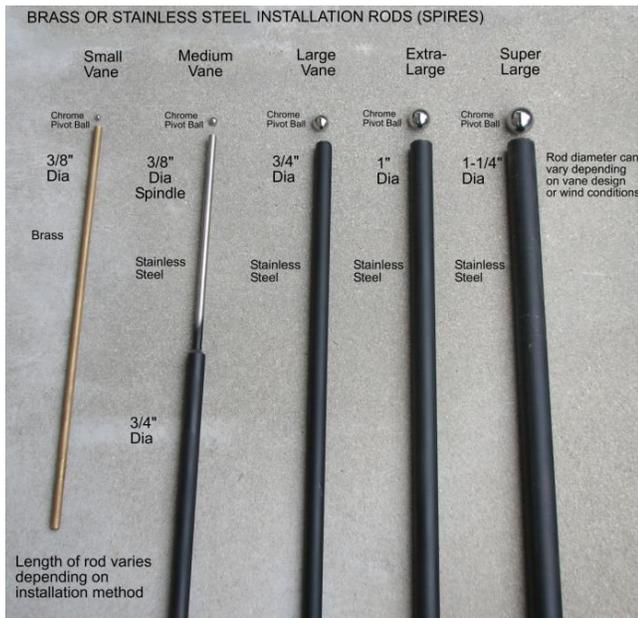
#### Tools and supplies recommended for installing the weather vane:

- Drill with a long shanked bit the same diameter as the vane's spire (vertical installation rod)
- Level
- Medium sized Phillips screwdriver
- Heavy grease (a small tub is included in the price and is sent out with the finished sculpture piece)
- Roof Caulk
- Compass

## Instructions for installing your weathervane:

1. Using your level, drill the appropriate diameter hole 7" to 8" (17.5-20 cm) down into the ridgepole. The hole size will be determined by measuring the widest diameter of your vertical installation rod (see spire photo below). The ridgepole needs to be at least a 2"x10" (5 x 20 cm). For additional support, more wood can be screwed or nailed to either side and/or underneath the ridgepole in the attic before proceeding.

If drilling through tile to reach ridgepole, first use a masonry bit that is one size larger than the spire, ie. vertical installation rod, diameter to go through tile. Then switch to the rod sized bit to go into the wood.



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

### Stainless Steel 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.

2. Insert larger end of spire (some installation rods have a beveled reducer to a smaller diameter) into drilled hole and make sure it reaches the bottom of the hole. Then confirm that it is vertical using the level. If it is not, use a nail, wooden shim, etc. to make it plumb. The spire (vertical installation rod) must be exactly vertical for your new weather vane to spin freely. (Note: the rod itself does not turn, only the sculpture piece).

**NEVER TUG OR PULL ON SPIRE (vertical installation rod).**

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

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

- Slide brass ring on spire. Allow it to slide to bottom. Do not tighten yet.
- Slide on large globe. Allow it to gently slide to the bottom of the rod. Do not tighten yet.
- Gently slide on interlocked brass directionals to 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 spire/rod does **not** have a beveled reducer to a smaller rod, slide on the second brass ring and slide down to rest on directionals. Do not tighten yet. *Note: If rod is reduced in diameter at the top, disregard this step.*
- Carefully slide on the smaller copper globe. *Note: If installed rod is a smaller diameter 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 on the beveled section of the spire rod.*
- *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 the section of the spire (vertical installation rod) that will be covered by the vane sculpture piece with grease. (Use small tub of grease included with weathervane).

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

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 and transfer the vane over the top of spire (vertical installation rod) and gently slide sculpture down into place. *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.*

8. Now slide harness components resting at bottom of rod (as detailed in #4 above) up into place and tighten with a screwdriver. See image below for suggested vertical positioning. 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 precisely orient the directional letters.)



**Correct Harness Assembly**

Directionals are correctly interlocked and spaced



**Incorrect Harness Assembly**

Directionals are **not** correctly interlocked and spaced

### Some Variations on the Basic Drilled Installation Method



#### Basic Drilled Installation Method - Variation #1

The photo above was sent to us by a customer. I've included it here to show an interesting solution to a fairly common problem. His ridge pole was a 2"x4" (5x10 cm) which made drilling down the recommended 7 to 8 inches (17.5 to 20 cm) impossible. He cut away a 4" (10 cm) section of his 2x4 and installed a 4x4 (10x10 cm) vertically in its place. He then drilled down into the 4x4 to get a strong connection for his spire (installation rod)



#### Basic Drilled Installation Method #2

This is a large cupola with a vaulted ceiling. The vertical center post extends down into the open space below the vault. If you have a minimum 4"x4"x8" (10x10x20 cm) center block supported by rafters, it is an ideal setup for the Basic Drilled Installation Method.

**If lightning is an issue in your area, you can get a referral by  
contacting: Lightning Protection Institute  
203 N. 36th Street - Unit A  
P.O. Box 6336  
St. Joseph, MO 64506  
Phone: 800.488.6864 or 816.233.0140  
Email: [LPIMain@stjoelive.com](mailto:LPIMain@stjoelive.com)**