

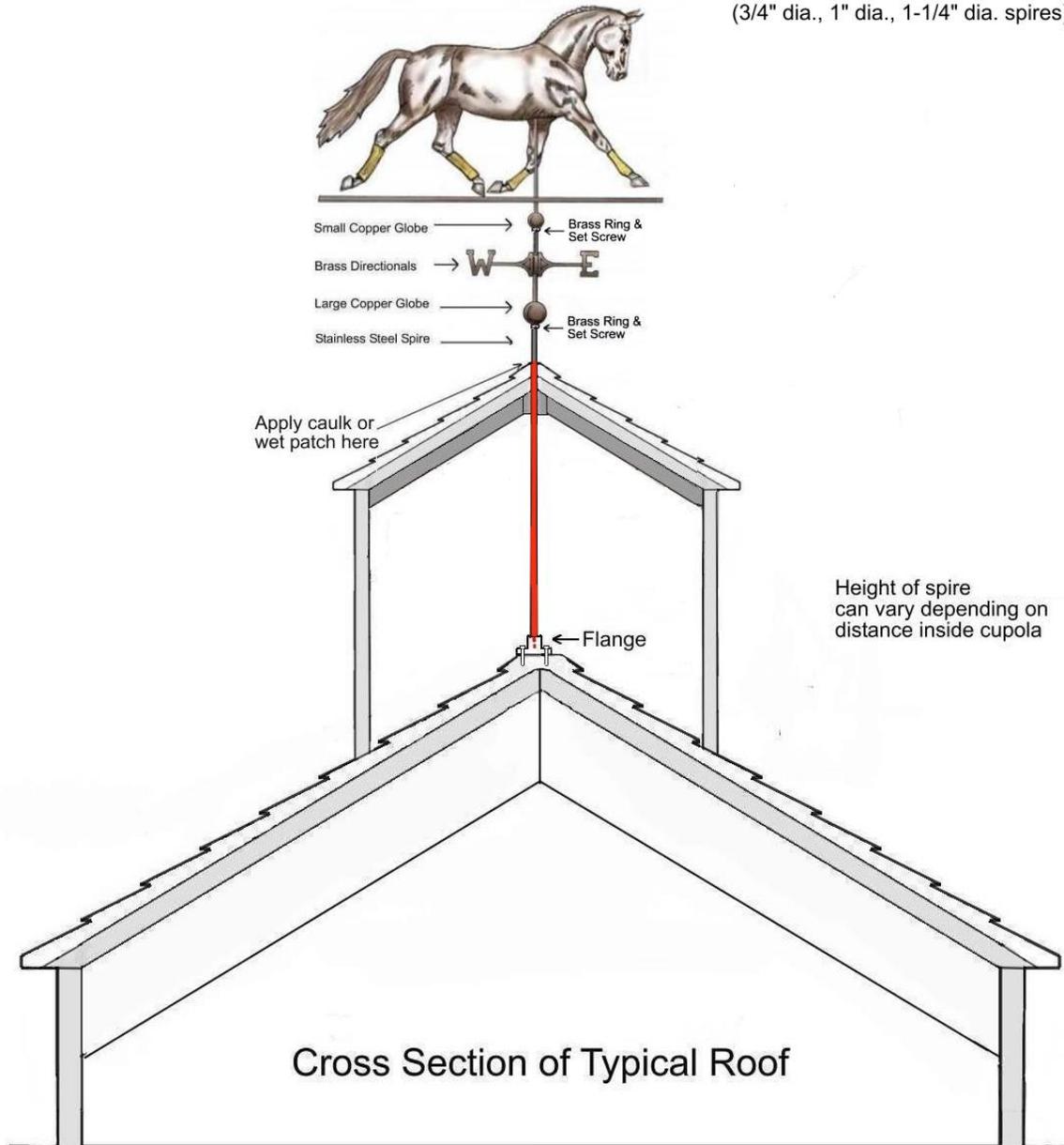
# West Coast Weather Vanes

Cupola Installation Method *without* Internal Cross Brace –  
Large (3/4" dia.), Extra-Large (1" dia.) and Super-Large (1-1/4") Installation Rods  
*Requires internal cupola access*  
*This installation is much easier with two people.*

## West Coast Weather Vanes

## Cupola Installation Method No Internal Cross Brace

Large, Extra-Large & Super-Large Spire  
(3/4" dia., 1" dia., 1-1/4" dia. spires)



Cupola install - Larger Sized Spires  
without cross brace

**IMPORTANT:** In order to send you the correct length spire (vertical installation rod) and/or spire extension, we need to know the internal distance from the peak of the cupola to the roof below it. That way we can make sure that the correct amount of spire sticks out the top of the cupola to receive the vane sculpture and its components.

We do not recommend having the internal span be too great or you may get some flex in the section of rod inside the cupola when high winds are present.

*NOTE:* The maximum shipping length allowed by FedEx Ground Service is 108" (~274 cm) long, including packaging. A galvanized steel pipe can be used to extend this length.

If you are in construction now, we can send out the installation hardware as soon as the order has been placed. It can then be installed prior to the roof being sealed off. The sculpture piece and remaining components will follow when completed to slide down over the already installed weathervane hardware.

### **Tools and supplies recommended for installing your 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 using the Cupola Installation Method:**

1. Drill the correct sized diameter hole in top of cupola roof.
2. From outside, slide spire (vertical installation rod) down into hole in cupola roof for inside access person to guide onto mounting surface.
3. Using a level, outside person lets inside person know when the spire is plumb.

Note: the rod itself does not turn, only the sculpture piece. **NEVER TUG OR PULL ON SPIRE (vertical installation rod).**



**Figure 1: Installed rod sticking up out of cupola**



**Figure 2: Using level to make sure rod is plumb**

4. Tighten cupola flange set screw against spire (vertical installation rod). Secure cupola flange to mounting surface.



**Cupola Flange**

5. Caulk roof around secured spire (vertical installation rod) to seal the hole.
6. Assemble ring, globes and directionals on spire (vertical installation rod)



\*

**Figure 3: Assembling Harness**



**Overhead view of interlocking directionals**

- Slide brass ring on spire. Allow it to slide to bottom of rod. *Do not tighten yet.*
- Slide on large globe. Allow it to gently slide to the bottom of the rod. *Do not tighten yet.*
- Slide on interlocked brass directionals and lower carefully to bottom of rod and rest gently on top of globe without denting. *Do not tighten yet.* (See photos below for assembly)



- If rod diameter does *not* reduce at the top, slide second brass ring to bottom of rod. *Do not tighten yet.* (Note: If rod does narrow 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 large 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 mentioned above.*

7. 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).

8. Optional Security Device Installation --- see separate Security Device Instructions  
**(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.*

9. Insert ONE steel ball into the mounting tube at the base of the weather vane sculpture piece.  
**(skip this step if your vane does have a security device)**



**Figure 3: Assembling Harness**

(The remaining steel balls are spares in case you drop the first one during the installation.)

Holding your finger over the base of the sculpture piece tube containing the steel ball carefully transfer the vane over the top of spire (vertical installation rod). Then gently slide sculpture down.

*Note: If your stainless steel rod reduces 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 beveled reducer section of the spire. If not, add a second ball bearing and check again.*

9. Now slide harness components detailed in #6 above into place and tighten with a screwdriver. See image below for suggested 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 precisely orient the directional letters.)



**Correct Harness Assembly**  
Directionals are interlocked



**Incorrect Harness Assembly**  
Directionals are **not** interlocked

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