

TECHNICAL INNOVATIONS
7851 Cessna Ave.
Gaithersburg, MD 20879
301-977-1106

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INSTRUCTIONS
CIRCULAR SKIRT CS-15

Parts List

Fiberglass pieces (8)
Carriage Bolts & hardware (16)
Caulk
Instructions, including drawings

Introduction

The CS provides a transition from the 15 foot PRO-DOME observatory to a circular building or foundation or gabled roof. These instructions cover several methods of installation. Please read all the instructions to assure your understanding of these various methods.

When assembled, the CS forms a complete circle 15 ft., 8 in., with a drip flange 1 ½ in. high. The CS has a horizontal ring flange of about 4 in. radial width, with an ID of 172 in. The edges of this ring flange do not overlap.

Each CS section has an overlap on one of its sloping sides. These overlaps will be bolted to the adjacent sections. Use a 5/16 in. bit when drilling holes.

Installation

1. Normal installation A typical installation on a circular foundation or wall should allow for the drip edge of the CS to be both above and outside the "rim" or top edge of the building or the ground. The CS horizontal flange is mounted on top of the foundation and below the bottom flange of the base ring (or below the wall ring bottom flange if these are used.) The bolts that connect the base ring to the foundation will also hold the CS in place.

If you need to adjust the dimensions of the CS to match your foundation and/or base ring, it is OK to pull the CS sections apart slightly, but not so much that the overlap on the sloping side no longer covers the adjacent edge. In

contrast, you may need to make the CS smaller, which you can do by trimming off some of the horizontal flange and the sloped edge (not the overlap). Use a saber saw. Be sure to use eye and ear protection.

When the size is just right, drill holes (or cut slots) in the CS to match the foundation bolt locations and the base ring flange bolt holes. Also, drill holes through each overlap into the piece below and insert bolts, nuts, washers. If it is feasible, install eight blocks of wood or other material horizontally between the drip flange and the foundation. Use screws through the drip flange. This will help to stiffen the CS against wind and other forces.

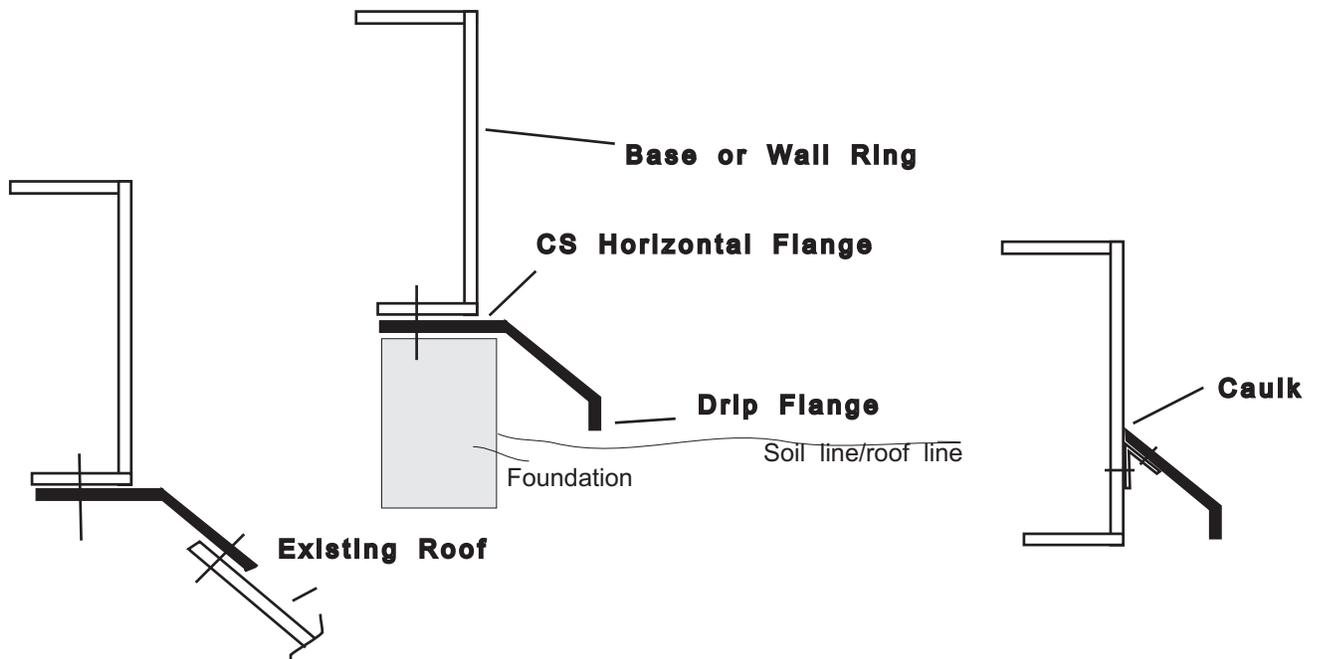
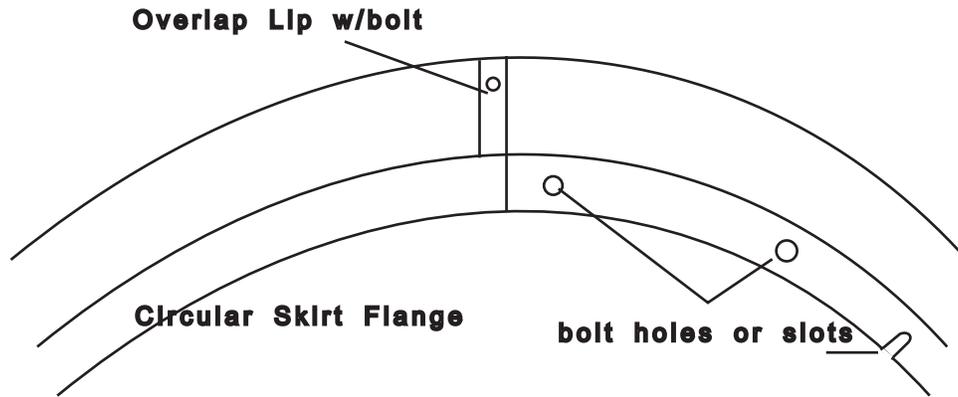
The joint between the base ring and CS must be caulked with high quality silicon caulk. Likewise, caulk the overlap joints.

2. No drip flange In some installations, portions or all of the drip flange must be removed to allow the skirt to transition to an existing roof. In this case, use a saber saw or other means to cut away the desired portions.

3. No horizontal flange. In other cases, it may be necessary to mount the CS on the wall of base ring rather than under the base ring flange. For example, this will be necessary if your PD-15 is mounted directly on a flat roof. In this case, some or all of the CS horizontal flange is removed, leaving a circular edge at the upper sloped part of the skirt. This edge is to be fitted against the outside surface of the base ring.

Removing the horizontal flange and assuring a close fit requires extreme care in measuring and cutting. You may use one section of the base ring as a guide, but be sure the CS is held at the proper angle or your measurement will be incorrect.

Once cut to the proper curve, the skirt can be joined to the outside of the base ring using simple angle brackets (metal or plastic) mounted with screws or pop rivets. Carefully seal the joint with caulk, or resin. It must be watertight or you lose the effect of the CS.



Circular Skirt Installation Methods