Introduction

The CS provides a transition from the ten foot HOME-DOME observatory to a circular building or to a gabled roof. These instructions cover several methods of installation of the circular skirt. The CS is shown in the attached drawing. The skirt is designed for use in several alternative ways. We urge that you read all the instructions to assure understanding of the methods of installation and use.

The CS forms a complete circle 10 ft. 8 in. with a drip flange 1 in. high. The CS has a horizontal ring flange of about 3 in. radial width, with an ID of 113 in. The CS is provided in four sectors. Each sector has a lip that overlaps the adjacent sector. The lips are caulked and bolted together with a single carriage bolt (1/4-20x3/4). Use a 5/16 in. drill for the bolt holes.

Installation

1. Normal Installation. A typical installation on a circular building or wall should provide for the bottom flange of the HOME-DOME base ring to be 4 in. above the "rim" or edge of the building. The CS horizontal flange is then mounted beneath the base ring, so that the base ring foundation bolts hold the CS in place. Holes may be drilled in the circular skirt that fit onto the foundation bolts, and the base or wall ring will then rest on the skirt. Alternatively, some of the CS holes may be prepared as slots, so that the skirt can be slid under the base or wall ring. Since the CS sections cover 90 degrees of arc, the slots will generally not be on a radius, but at an angle to the radius. The joint between the base or wall ring and the circular skirt must be caulked with high quality silicon caulk. The CS then slopes out and downward to the "rim" of the building. The CS drip flanges hang down the outside. The overlapped lips joining the sectors are bolted together as described above. If feasible in the installation, we recommend screws through the drip flanges (and into the building, if possible) to help prevent high winds from lifting the skirt.

2. No Drip Flange. In some installations, some portion of the drip flange must be removed to allow the skirt to transition to an existing roof. In this case, use a sabresaw or other means to cut...
away the desired portion of the drip flange. Be sure to use eye and ear protection. Assemble the CS using bolts as described above, or using screws through the CS into the roof.

3. No Base Ring Flange. In some installations, it may not be possible to mount the CS with its horizontal flange beneath a base or wall ring flange. This will be the case where the HOME-DOME cannot be raised four inches above the roof edge to be matched. In this case, some or all the CS horizontal ring flange may be removed, leaving a circular edge on the inside of the circular skirt. This edge would then be fitted against the outside surface of the base or wall ring.

To assure that the resulting fit of the skirt to the wall/base ring will be as good as possible, you need to measure and cut with care. It is best to use a section of base ring as a guide for marking the circle, but you MUST have the skirt at the proper angle to the base/wall ring surface or your measurement will be incorrect.

Once cut to the proper curve, the skirt can be joined to outside of the base or wall ring using simple angle brackets made of metal or plastic, preferably mounted on the underside of the skirt using screws, pop rivets, or other means. The joint can be sealed using high quality silicon caulk, bathtub edging or similar material, or by fiberglassing the joint (see an automotive or marine supply store for materials). Again, it is important to caulk and bolt the overlapping lips of the skirt sectors, and to screw down the outer edges of the skirt or drip flange to prevent wind damage.
Circular Skirt Installation Methods

- Overlap Lip w/bolt
- Circular Skirt Flange
- bolt holes or slots
- Base or Wall Ring
- CS Horizontal Flange
- Drip Flange
- Foundation
- Soil line/roof line
- Caulk
- Existing Roof