

**Technical Innovations  
7851 Cessna Ave.  
Gaithersburg, Maryland 20879  
301-977-9000**

## **HD10 OBSERVATORY**

The HOME-DOME (HD10) has a lower cost than the PD10, and is designed primarily for on-structure installation. The HD10 can accommodate most Schmidt-Cassegrain telescopes up to 16" and Newtonians (on German Equatorials) up to 16" diameter. Large yoke-mounted Newtonians may require a larger dome or an off-center telescope mount. Built to the same high standard of all TI domes, the HD10 has a 5' high dome made of two pairs of "quadrants" bolted together along internal flanges. The dome sits on a 12" high base ring that incorporates the ball bearing rollers for dome rotation. A reverse flange at the top of the base ring covers the roller area and keeps the dome safe from wind. The shutter opening is a generous 36" wide, extending up to zenith and 16" beyond. Two shutters open by sliding up and over the dome, then nest together outside the rear cover. As in all our observatories, two integral, automatic latches lock the shutter together for security when closed.

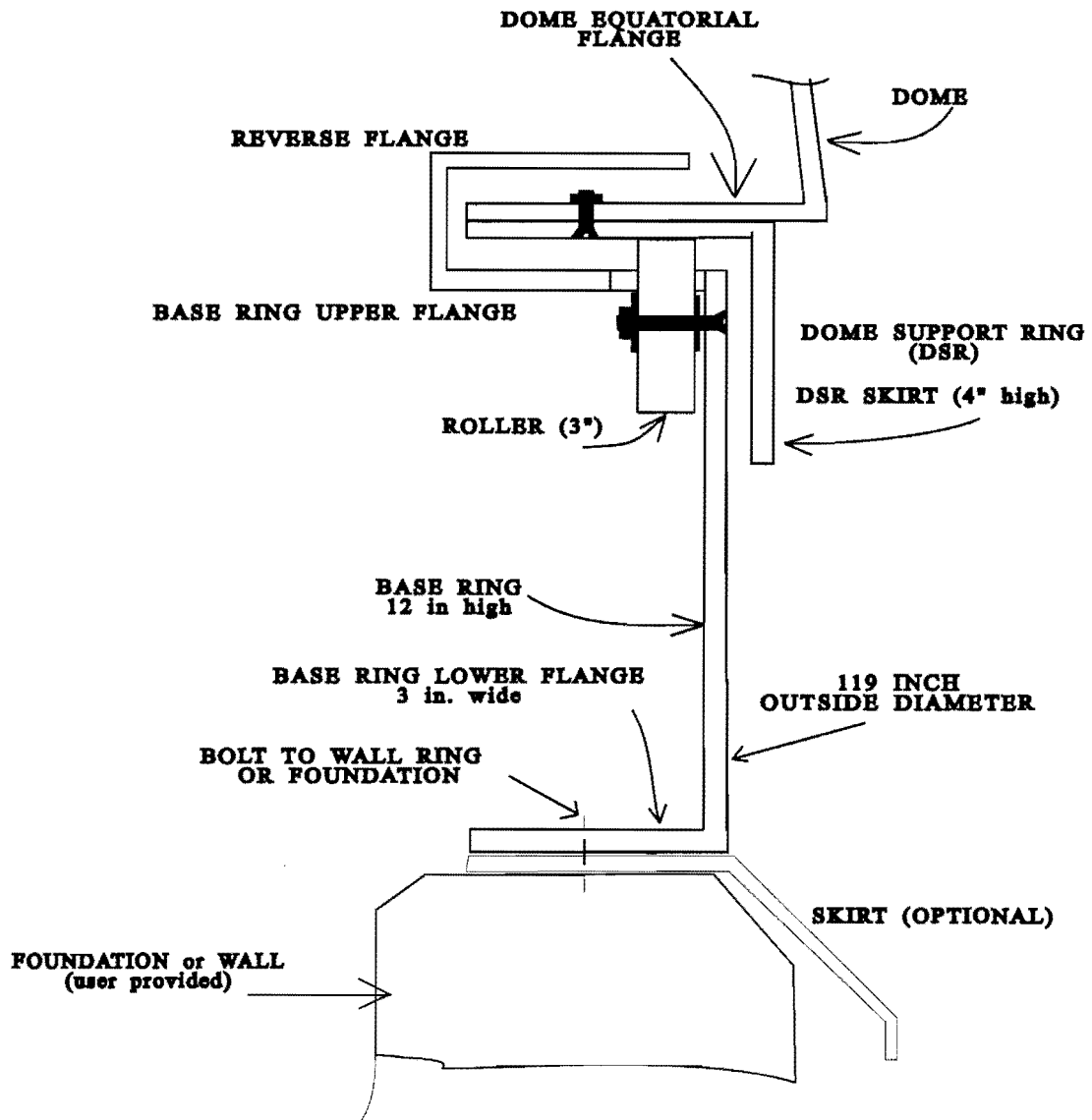
Because no part of the HD10 weighs more than about 45 lb, it is easy to assemble without use of cranes, even on top of high structures. As with our other dome designs, the HD10 must be securely mounted on a solid support structure. Rectangular and circular skirts often ease the transition to the existing or newly constructed structure. The domes use bolt-together construction. Assembly requires alignment of parts, measuring and drilling bolt holes, and use of common hand and power tools. Larger holes, for rollers and latches, are cut and finished at the factory. Assembly time required: two people, two days.

Two shutters move up-and-over, automatically disengaging during opening to nest together at the rear of the dome when open. This patented design makes the full shutter opening available to the astronomer (and assists in sky orientation for students). The dome turns easily on hard rubber, ball-bearing rollers mounted on the base ring. You can add motors to rotate the dome and move the shutters, and even operate the dome remotely.

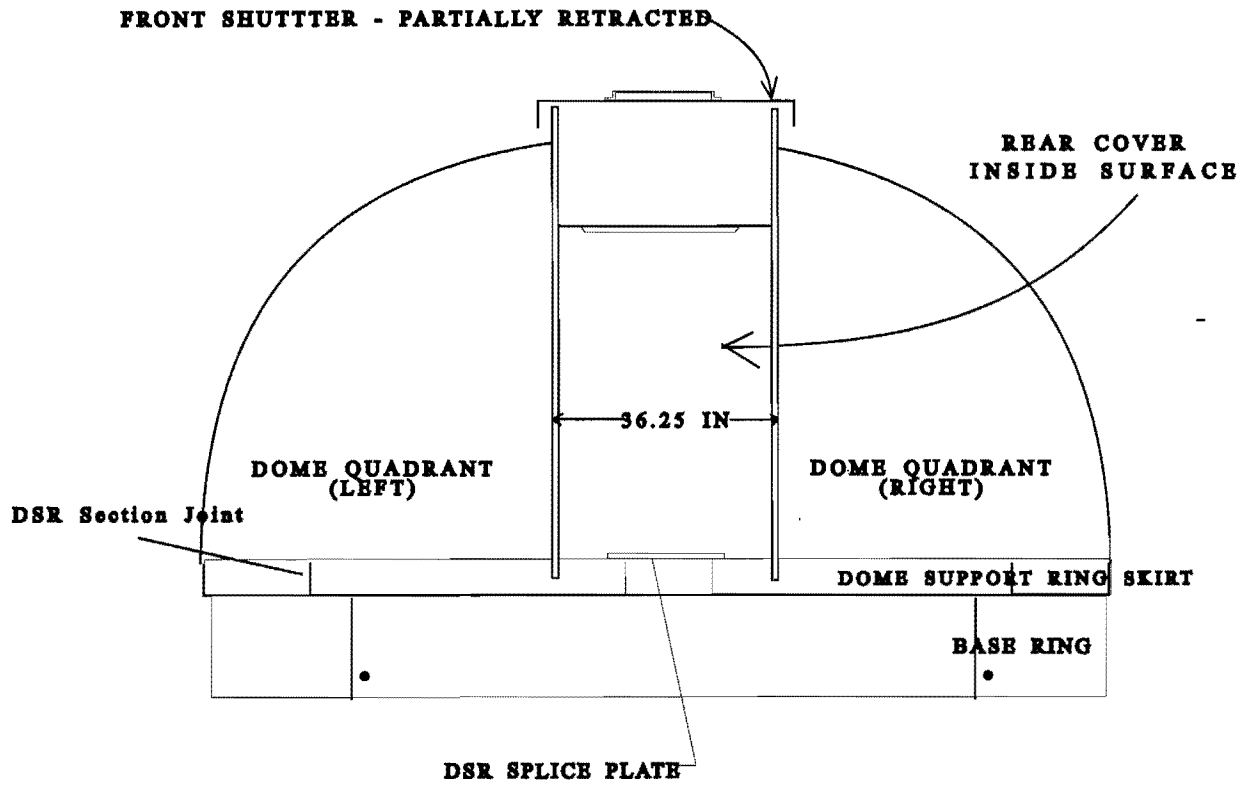
Weather protection is assured by overlapping flanges and baffling, not seals that will wear out or deteriorate. Temperature control is provided by a brilliant white exterior gel coat that normally keeps inside temperature within a few degrees of the shade temperature, so no cool-down period is required before your observing session begins. A dark blue interior helps preserve dark adaptation.

Nearly 1,500 of our domes are now in use by amateur and professional astronomers around the world, a great number of them HD10 models.

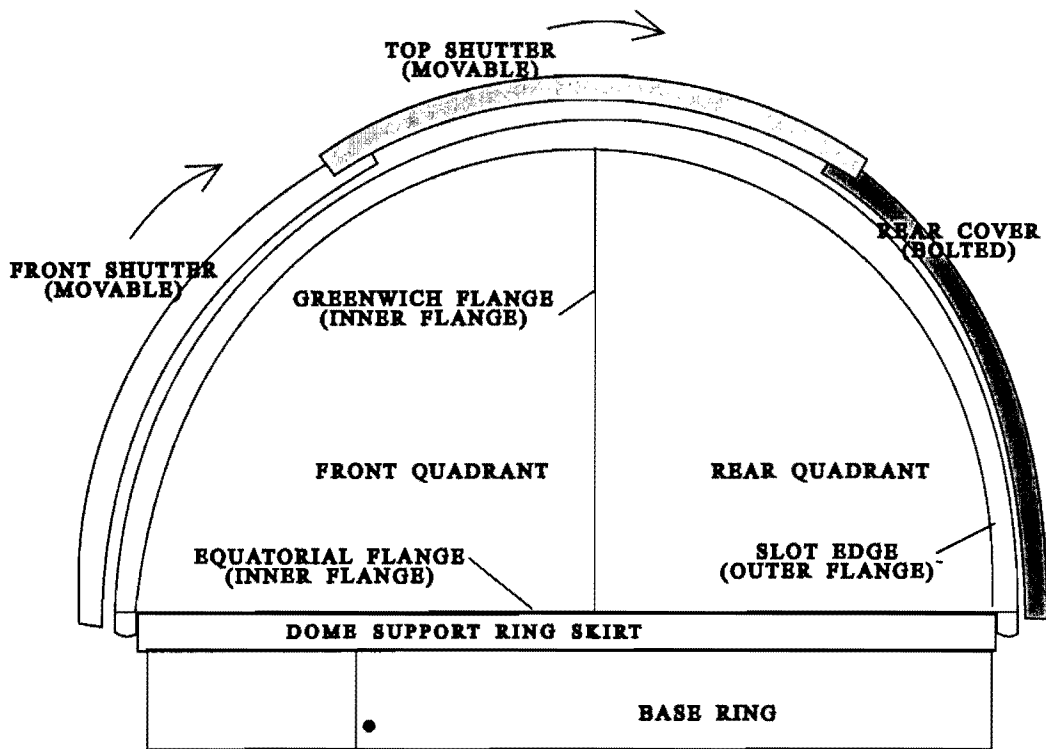




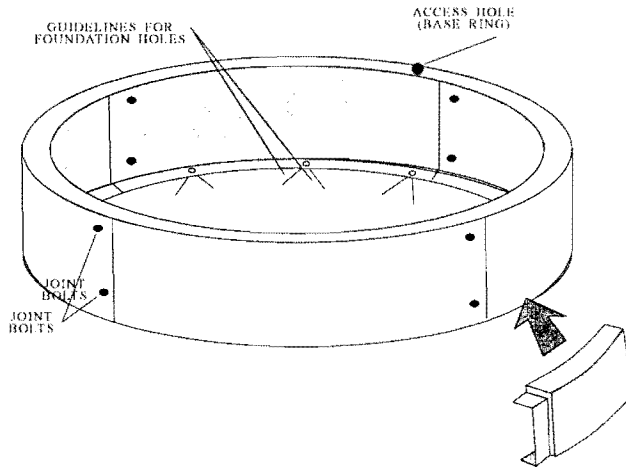
**HD10 Base Ring Structure**



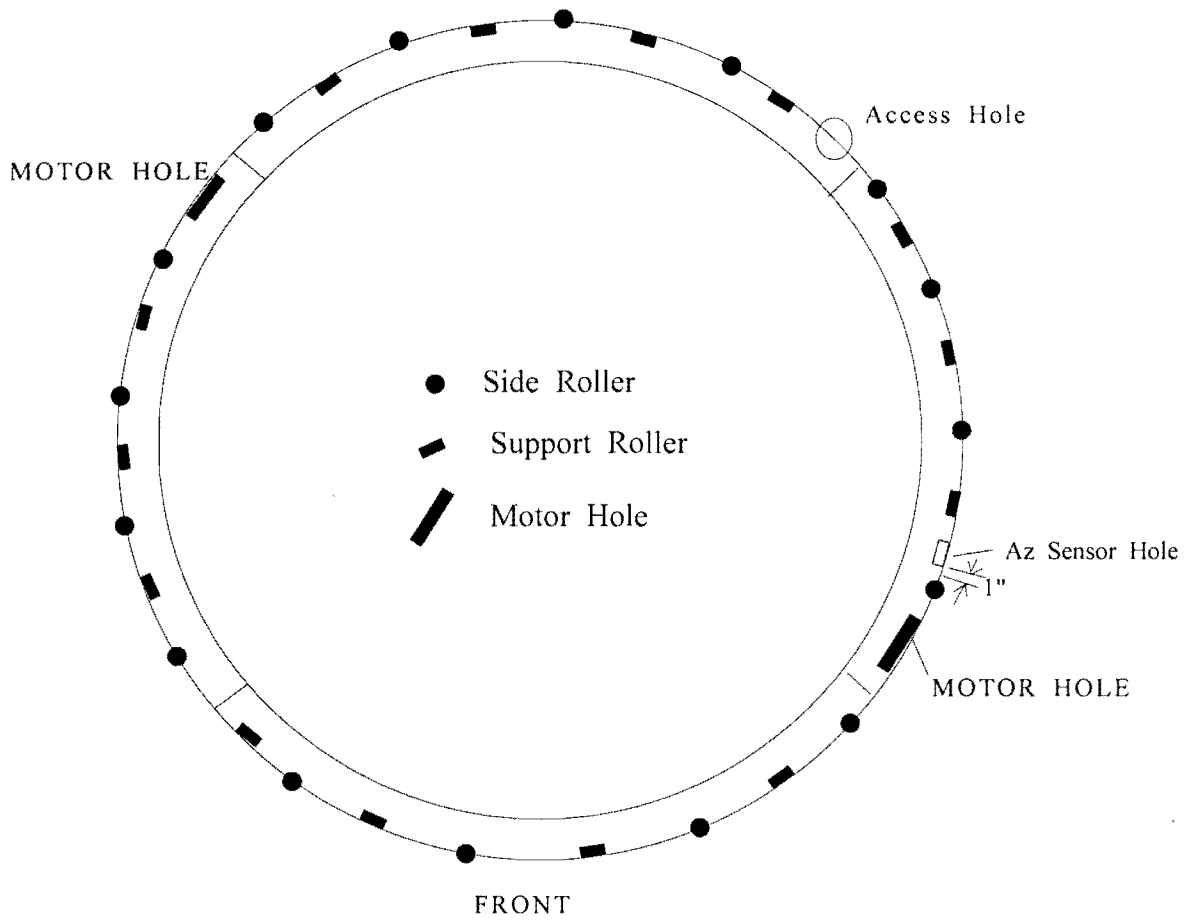
HD10 - FRONT VIEW



HD10 - SIDE VIEW



## BASE RING INSTALLATION



ROLLER HOLES NOT SHOWN

## BASE RING ARRANGEMENT

# HD10