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

HD15 OBSERVATORY

The 15' diameter HOME-DOME (HD15) observatory will accommodate all but the very largest amateur and professional telescopes with associated equipment, and provides room for group use of the observatory. The HD-15 uses the same proven design as the other TI observatories and is normally installed on an existing or new building or structure. A only unique feature of the HD-15 is the solid base ring in place of the 36" wide semi-door entrance on the PD15.

The HD-15 dome is made of four quadrants, bolted together along internal flanges. The slot opening is 50" wide, with 24" available past the zenith. The shutter is an up-and-over, two piece, automatic latching system. The shutters nest on the rear of the dome when opened. The HD-15 *includes* an electric shutter and electric dome rotation system, with power supply.

The dome sits on a 12" high base ring, and wall height of the PD-15 can be matched up with the optional circular skirt. The PD-15 can be installed at ground level on its own base structure, or can be mounted on a roof-top, tower, or other structure. The dome turns on 48 ball-bearing rollers mounted in the 12" high base ring. The standard HD-15 will meet all but the most stringent code requirements. Where needed, minor modifications can be made to meet special requirements. The base ring bottom flange (4" wide) must be securely bolted to your structure support foundation. Assembly time required: two people, three days, with additional people or equipment needed for certain steps.

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 number of them HD15 models.

Nominal dome diameter
Base ring O.D.
Base ring I.D.
Base Ring Height
Height at Center w/ base

• Material of construction Fiberglass polyester resin, 3/16" thick min.

Surfaces Gel-coat

· Color, Outside/Inside White/Dark blue

- Shutter opening - Width 50"

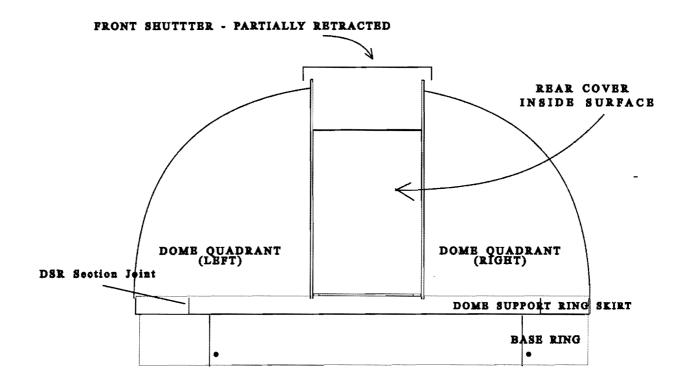
- Height 18" past zenith
- Shutter design 1 ea. front & top
- Shutter Movement Up and over, selfstoring in rear

Rollers 48 (3 in. diameter), ball bearing

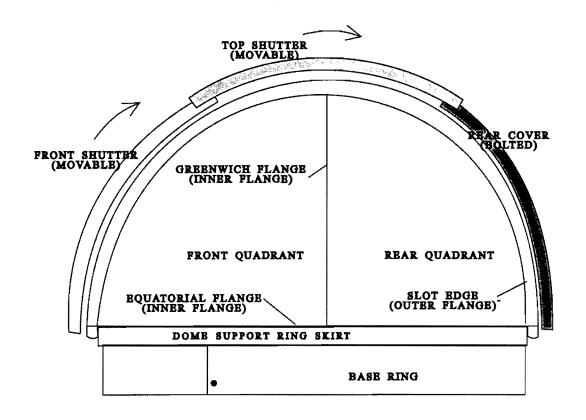
Weight, dome and shutters 650 lbs.

• Force to turn dome Electric/ 4 drive motors

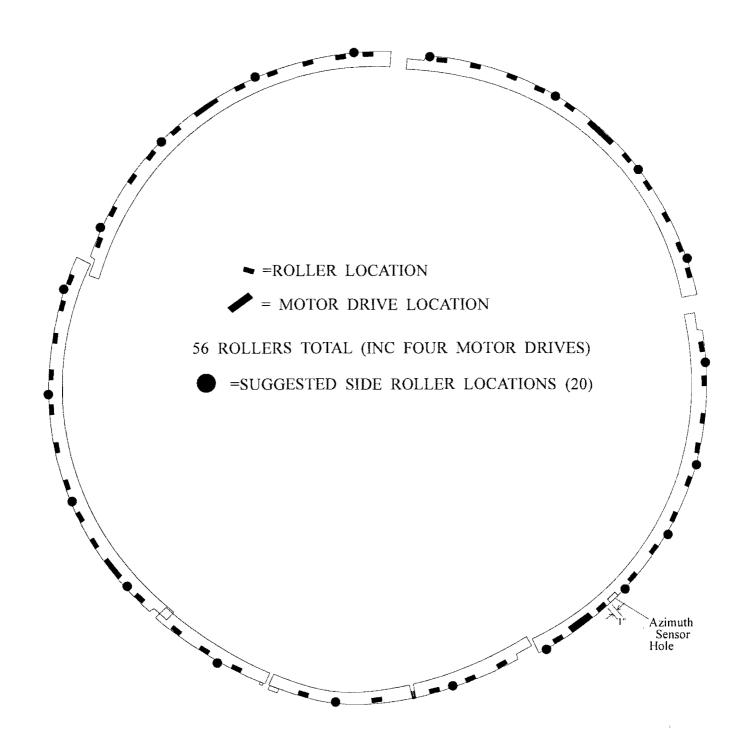
Force to open shutters
Force to close shutters
Wind Load
Snow Load
Electric
110mpg
40 lb./sq/ft.



HD15 - FRONT VIEW



HD15 -SIDE VIEW



HD-15 Base Ring Identification (no door) (4 motor installation)