

**Technical Innovations  
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## **PD15 OBSERVATORY**

The 15' diameter PRO-DOME (PD15) 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 PD-15 uses the same proven design as the PD-10 observatory and is also normally installed on a concrete pad or wooden deck. A unique feature of the PD-15 is the 36" wide semi-door entrance which meets requirements for access by disabled persons.

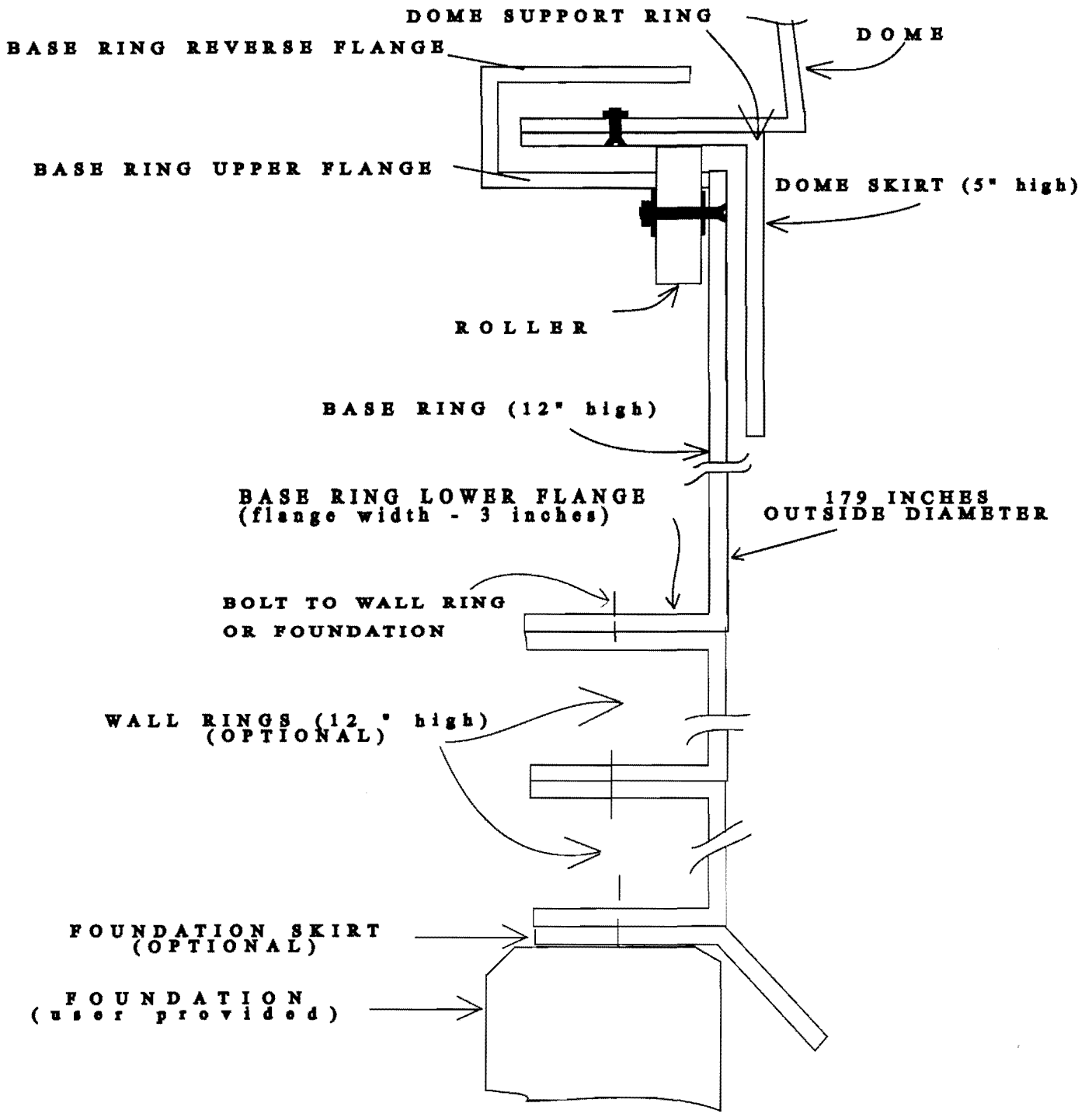
The PD-15 dome is made of four quadrants, bolted together along internal flanges. The slot opening is 50" wide, with 24" available past the zenith. The shutter is an up-and-over, two piece, automatic latching system. The shutters nest on the rear of the dome when opened. The PD-15 *includes* an electric 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 increased by adding matching 12" high wall rings. Each ring includes a molded door section. The PD-15 can be installed at ground level on its own foundation, 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 PD-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) will be bolted to your foundation. Assembly time required: two people, three days, with additional people or equipment needed for certain steps.

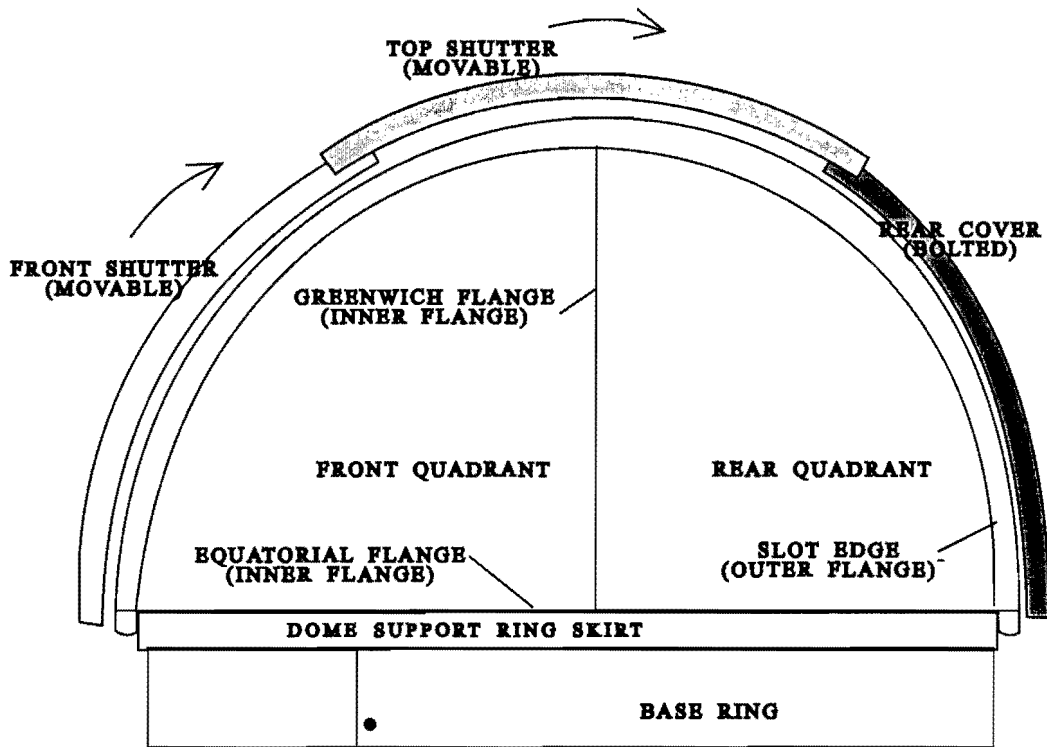
Weather protection is assured by overlapping flanges and baffling, not seals that will wear out or deteriorate. Temperature control is provided by a brilliant white exterior gel coat that normally keeps inside temperature within a few degrees of the shade temperature, so no cool-down period is required 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 great number of them PD15 models.

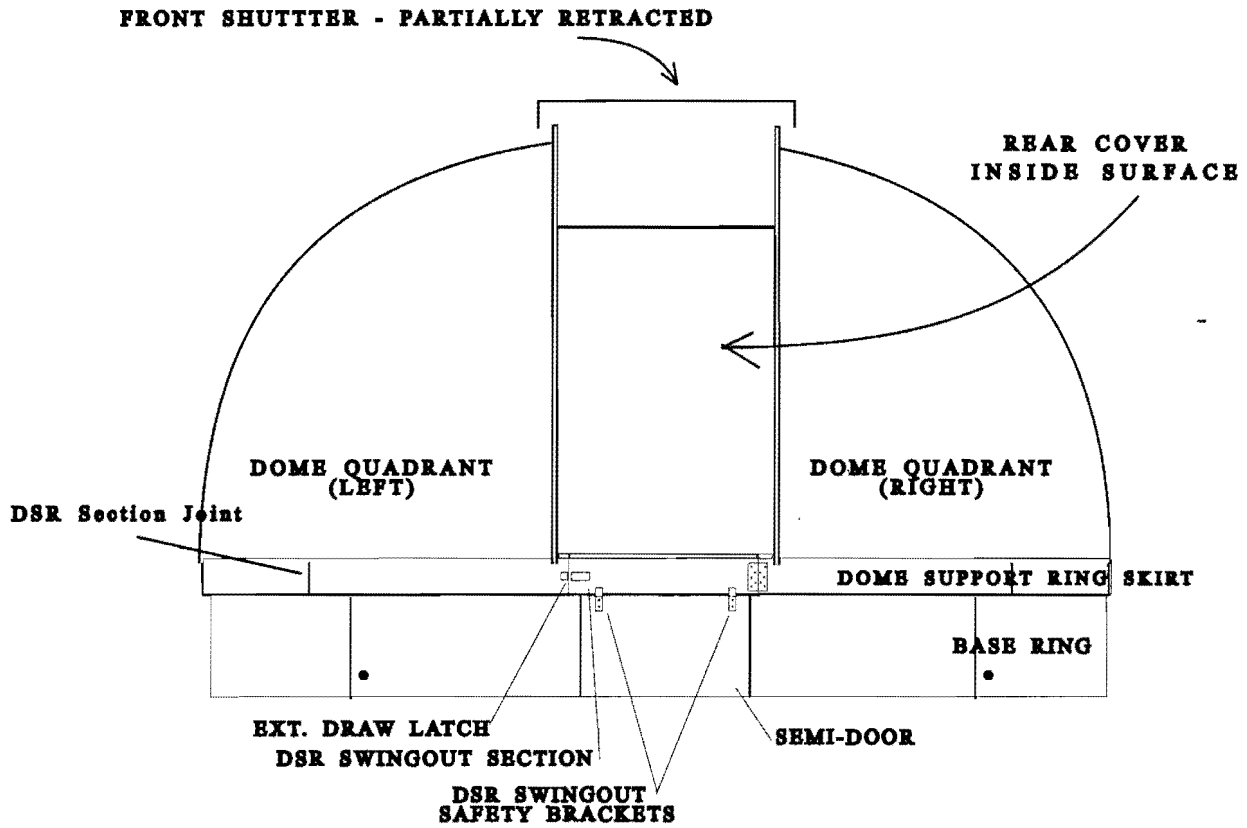
·	<b>Nominal dome diameter</b>	<b>180"</b>
·	<b>Base ring/Wall O.D.</b>	<b>179"</b>
·	<b>Base ring/Wall I.D.</b>	<b>171"</b>
·	<b>Base/Wall Ring Heights (ea)</b>	<b>12"</b>
·	<b>Height at Center w/ base</b>	<b>102"</b>
·	<b>Semi Door width</b>	<b>36"</b>
·	<b>Material of construction</b>	<b>Fiberglass polyester resin, 3/16" thick min.</b>
·	<b>Surfaces</b>	<b>Gel-coat</b>
·	<b>Color, Outside/Inside</b>	<b>White/Dark blue</b>
·	<b>Shutter opening - Width</b>	<b>50"</b>
	<b>- Height</b>	<b>18" past zenith</b>
·	<b>Shutter design</b>	<b>1 ea. front &amp; top</b>
·	<b>Shutter Movement</b>	<b>Up and over, self-storing in rear</b>
·	<b>Rollers</b>	<b>48 (3 in. diameter), ball bearing</b>
·	<b>Weight, dome and shutters</b>	<b>650 lbs.</b>
·	<b>Weight, wall ring</b>	<b>125 lbs</b>
·	<b>Force to turn dome</b>	<b>Electric/ 4 drive motors</b>
·	<b>Force to open shutters</b>	<b>Electric</b>
·	<b>Force to close shutters</b>	<b>Electric</b>
·	<b>Wind Load</b>	<b>110mpg</b>
·	<b>Snow Load</b>	<b>40 lb./sq/ft.</b>



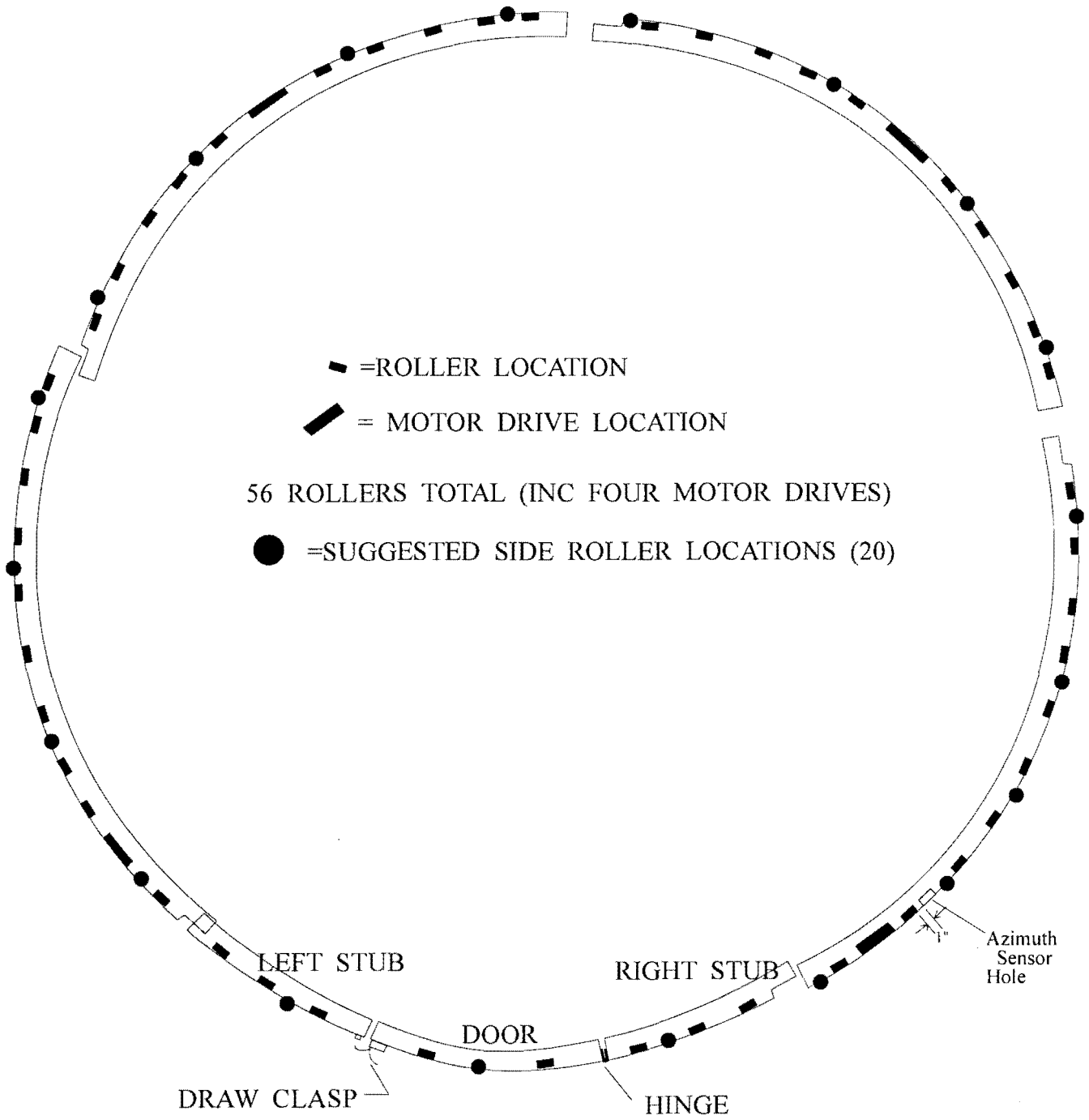
**PD15 - Wall/Base Ring Structure**



PD15 -SIDE VIEW



PD15 - FRONT VIEW



PD-15 Wall/Base Ring Identification  
 (4 motor installation)