

Plans for building an 18inch f4.4 Dobsonian Telescope.

More information can be found online, see url/qr code below.

The following pages detail the complete set of plans for an 18" Dobsonian based upon Dave Kriege and Richard Berry's excellent book.

Page 2 - Book p117 - Mirror Flotation System and Cell.

Page 3 - Book p123 - Detail of Flotation System Triangles and Bars.

Page 4 - Book p157 - Secondary Cage Assembly

Page 5 - Book p221 - Split-Blocks.

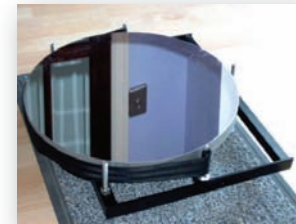
Page 6 - Book p243 - Side View of Rocker Box, Ground Board and Side Bearings.

Page 7 - Completed Telescope.



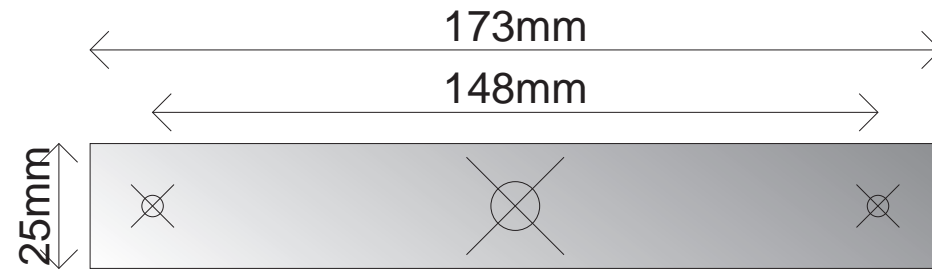
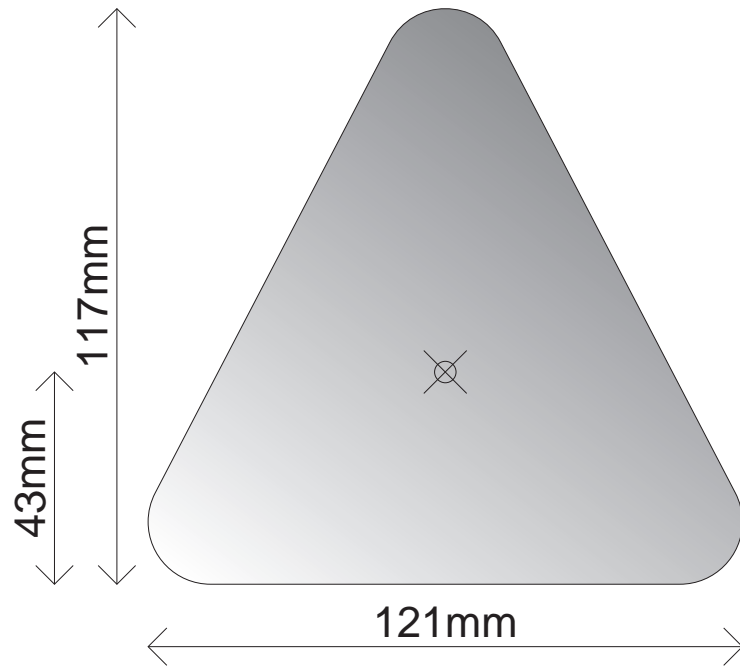
<http://www.ngc891.com/>





Mirror Flotation System and Cell, p117

18inch Mirror Tailgate is made of three mild-steel bars 25mm x 25mm (502mm long), and 2 mild-steel bars 6.5mm x 32mm (397mm long).
 Collimation holes are 10mm, tapped at 8mm - Split bolt hole size 10mm - Side pin hole size 10mm.
 Mounting hole sizes 8mm, 4 along each side rail, 2 along top rung.

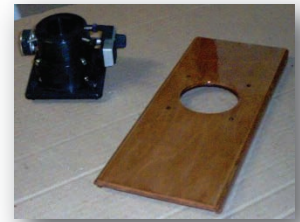
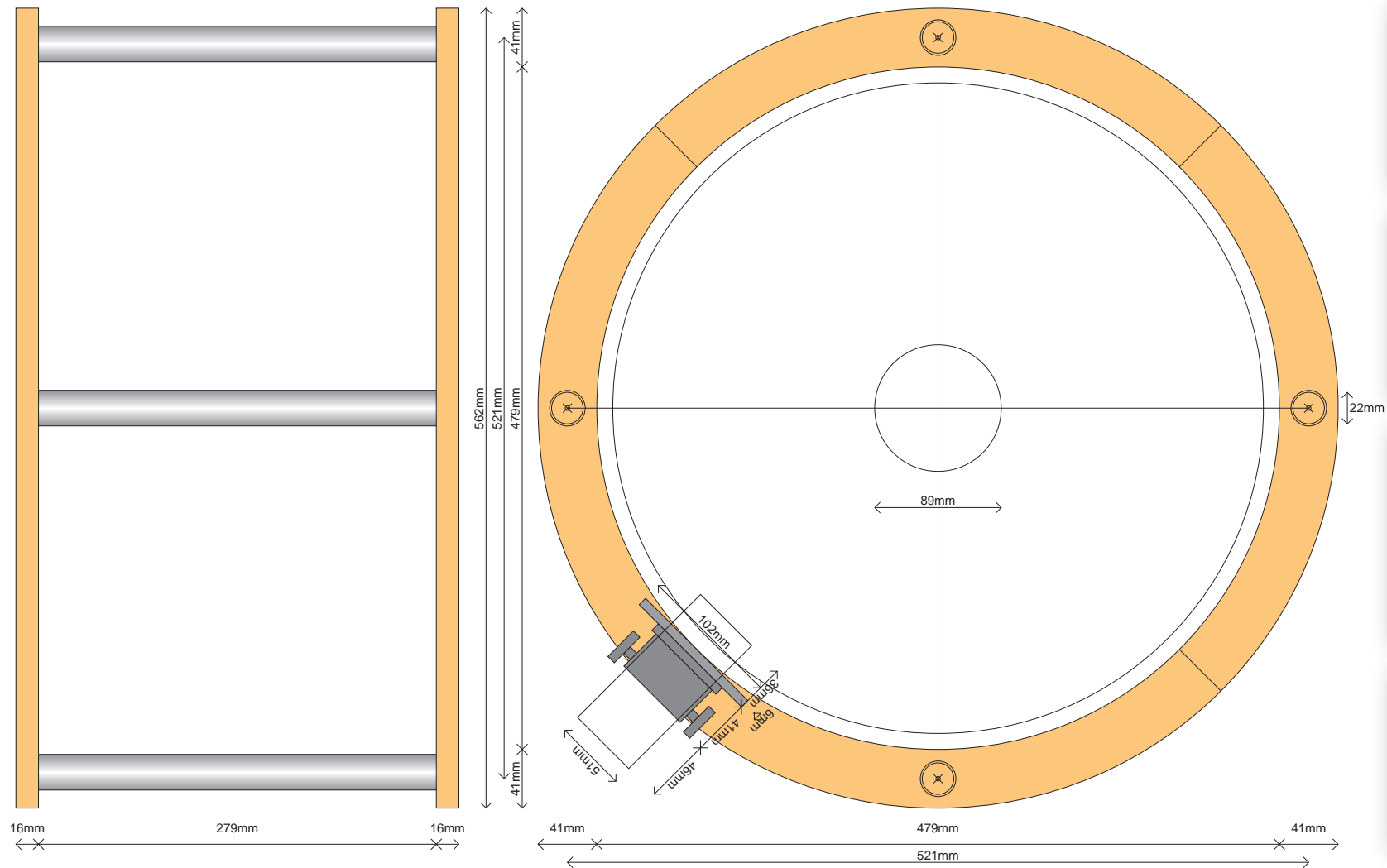


Detail of Flotation System Triangles and Bars, p123

Thickness of triangle 1/8" (3mm).

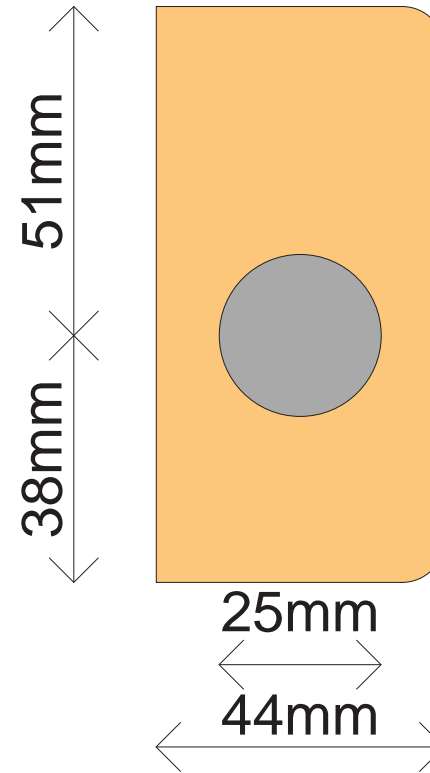
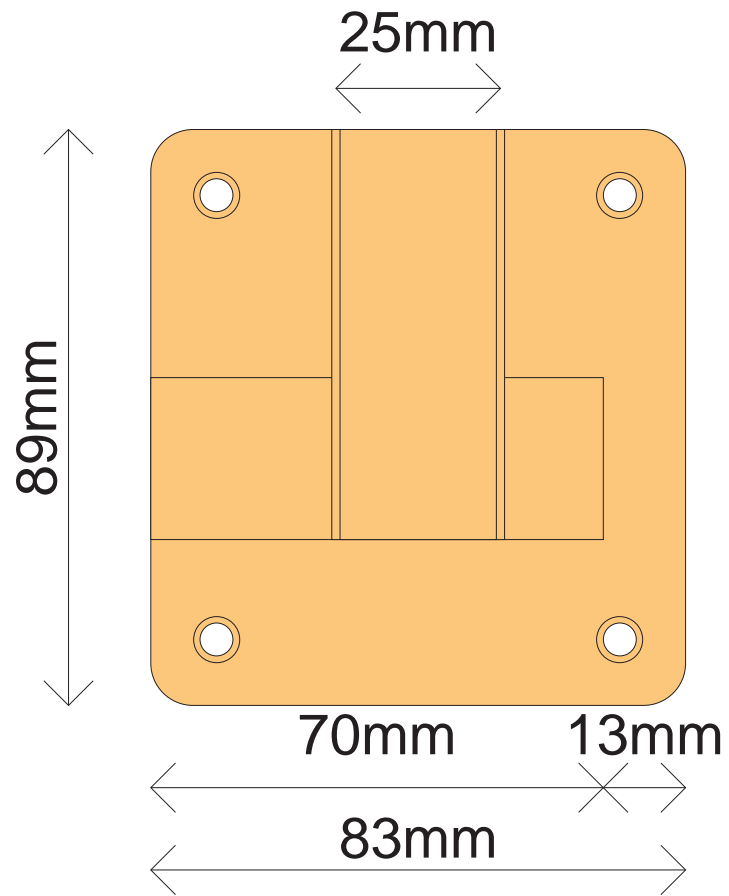
Thickness of bars 3/16" (5mm).

6 Triangles, 3 bars all in stainless steel.



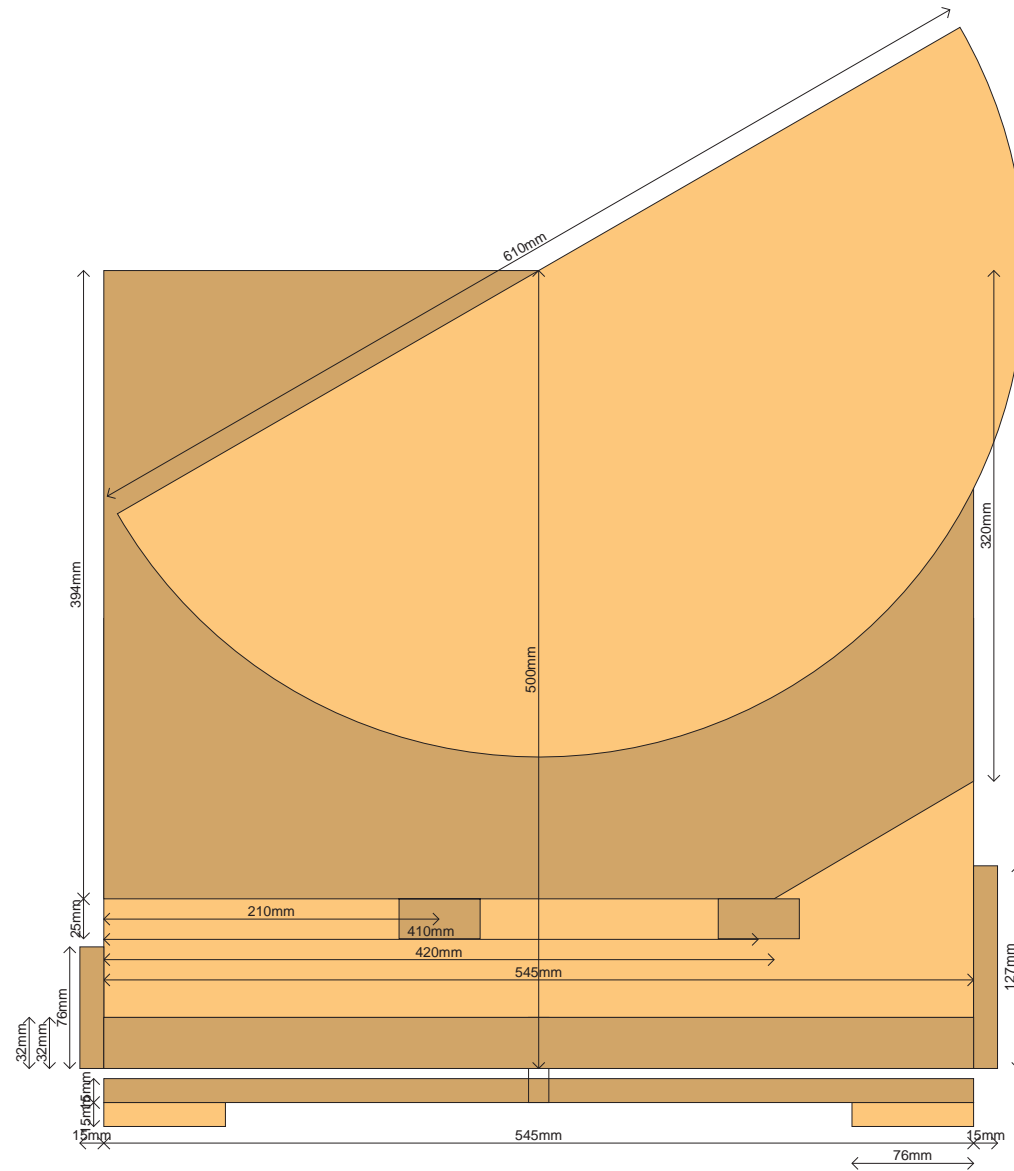
Secondary Cage Assembly, p157

Use low profile focuser on focus board. Also use extra wood to strengthen board see p168. Place focuser and board as close to tube as possible, allowing enough space for the full travel of the focuser. Use kydex on inside of tube. Tubes are 1" OD 0.871" ID 0.056" wall thickness (25mm OD 22.14mm ID 1.43mm wall thickness) MARK AND DRILL ALL HOLES BEFORE CUTTING RINGS! MAKE THIS AS LIGHT AS POSSIBLE, IT WILL REDUCE OVERALL WEIGHT AND EYEPIECE HEIGHT.



Split-Blocks, p221

8 required, 4 left-handed and 4 right-handed (i.e. mirror images of each other).



Side View of Rocker Box, Ground Board and Side Bearings.

Height of rocker box (and therefore end board height) depend on balance and side of mirror box!

Make feet and gap between rocker board and ground board as low as possible.

Teflon pads should be between 65 and 70 degrees apart, depending on friction calculations, see chapter 9 p243 and section 10.3.

