

APPENDIX 9 – TEMPLATES FOR DIAL DESIGN

A DRAFTING SHEET FOR VERTICAL DECLINING DIALS TO FIND STYLE DISTANCE < STYLE HEIGHT, AND TO FACILITATE LOCATING THE HOUR LINES.

A9.1

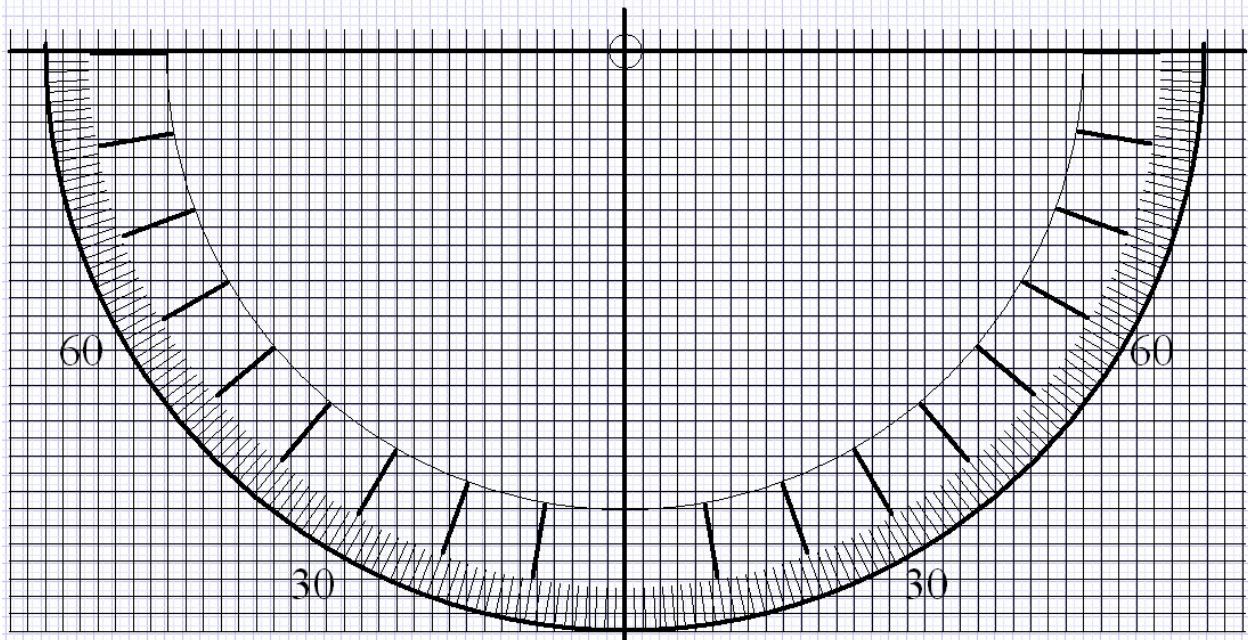
Draw gnomon here for south dials declining east

Draw wall declination here for south dials declining east

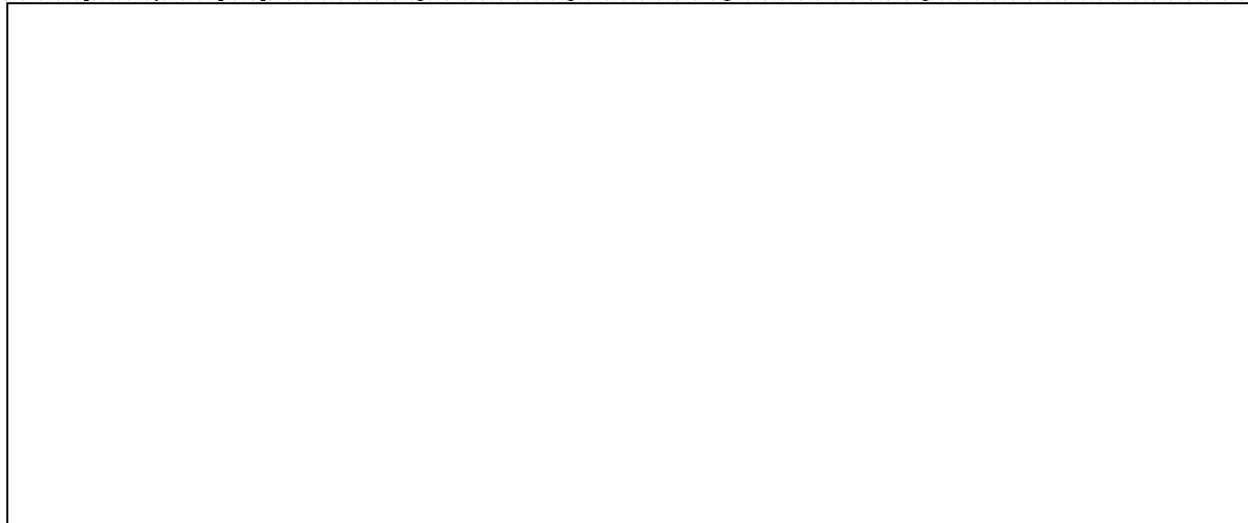
Draw wall declination here for south dials declining west

Draw gnomon here for south dials declining west

East and west decliners have their hour line angles reversed. By following the rules above for the gnomon and the declination, the final hour lines drawn will be correct, with am on the left (west), and pm on the right (east).



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Dial location

Dial plate hour lines here

Gnomon here

latitude

equinoctial line

noctis

sub style

style

lat

Latitude: _____

Longitude: _____

long. corr: _____

Equation of time:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
+9	+14	+9	=0	-3	0	+6	+4	-5	-14	-15	-5

Magnetic declination: _____

Horizontal dial

05 06 07 08 09 10 11 12

1 2 3 4 5 6 7

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Dial location

Dial plate
hour lines here

Magnetic declination:

Gnomon here

Vertical dial
Wall declination N/S E/W

90

0

90

90

0

90

Equinoctial line

Latitude:

sub style

style

lat

nodus

Equation of time:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
+8	+14	+9	=0	-3	0	+6	+4	-5	-14	-15	-5

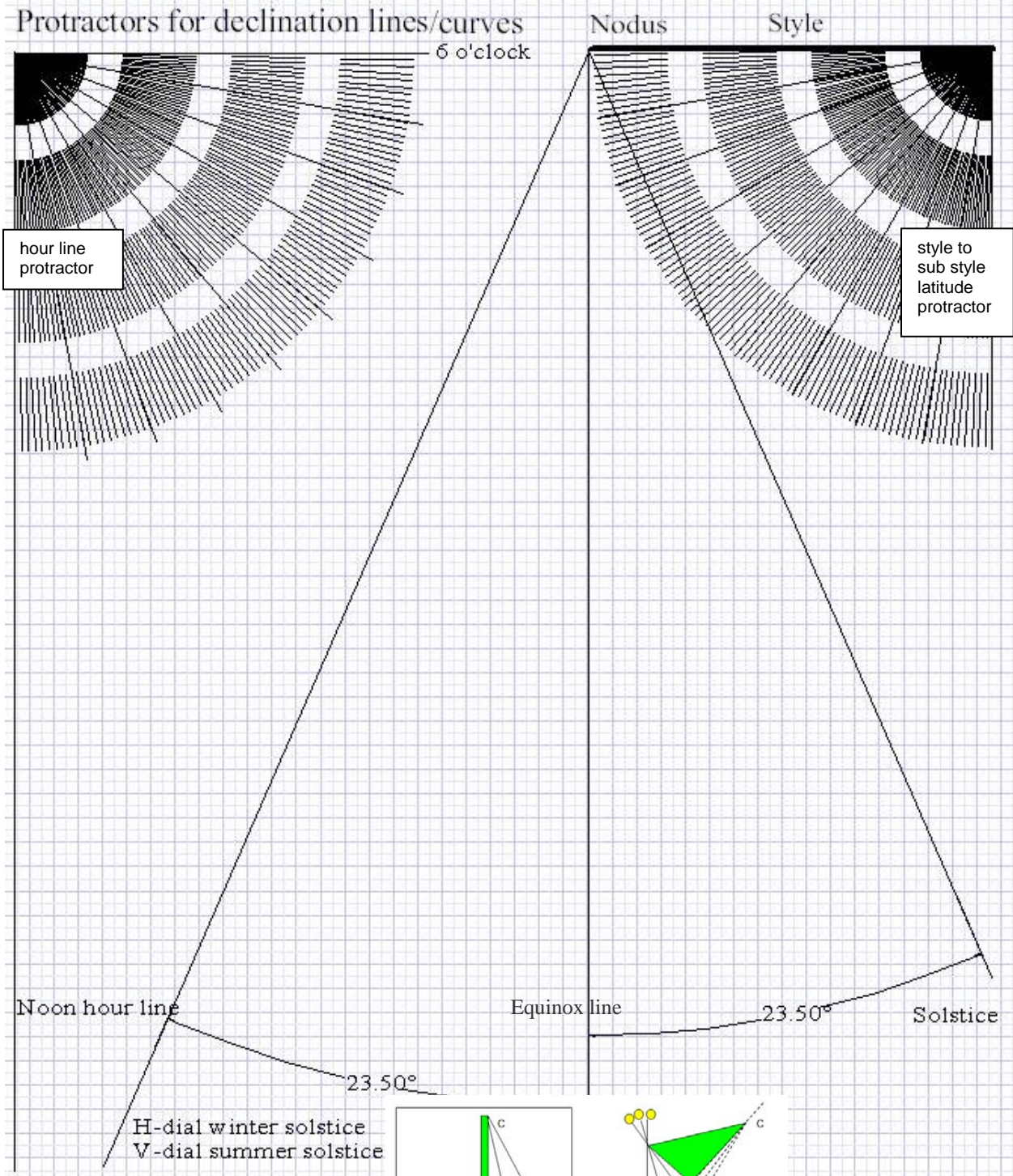
05 06 07 08 09 10 11 12

1 2 3 4 5 6 7

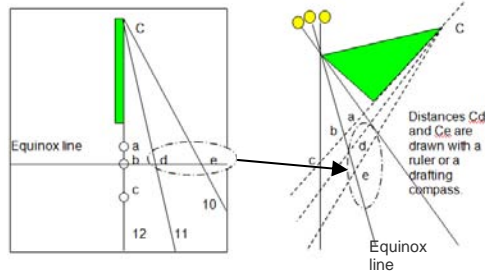
Longitude: COIT:

Latitude:

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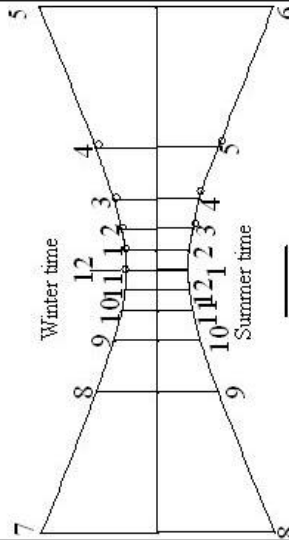


Time is indicated
 + longitude
 + monthly
 + summer

Jan	Feb	Mar	Apr	May	Jun
+9	+14	+9	=0	-3	=0
Jly	Aug	Sep	Oct	Nov	Dec
+6	+4	-5	-14	-15	-5

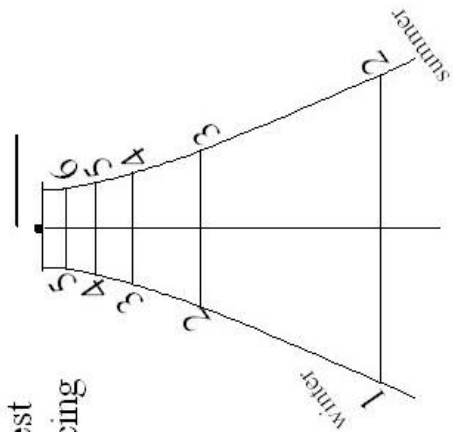
This dial may be tilted and thus work for any latitude.

Jan	Feb	Mar	Apr	May	Jun
+9	+14	+9	=0	-3	=0

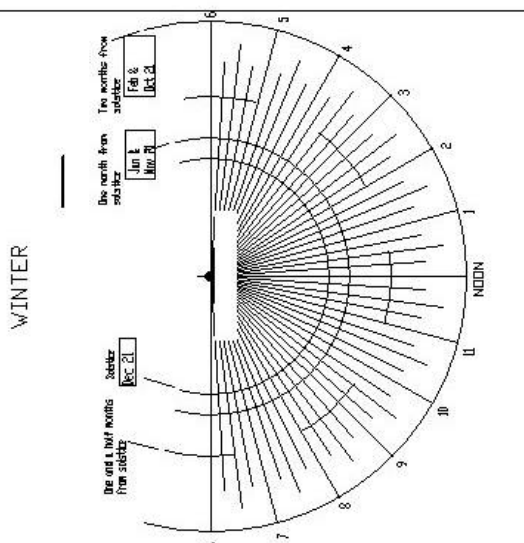
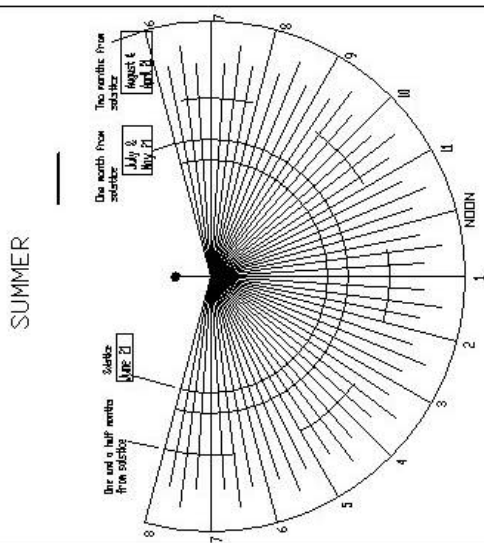
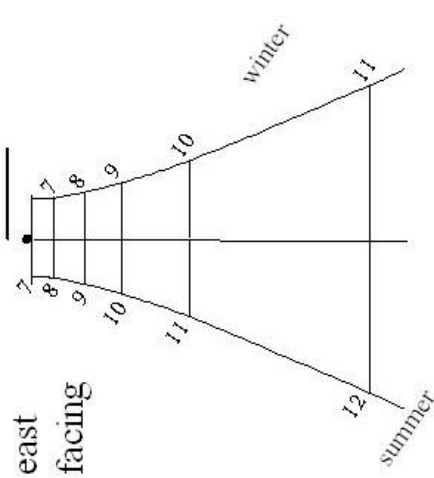


Jly	Aug	Sep	Oct	Nov	Dec
+6	+4	-5	-14	-15	-5

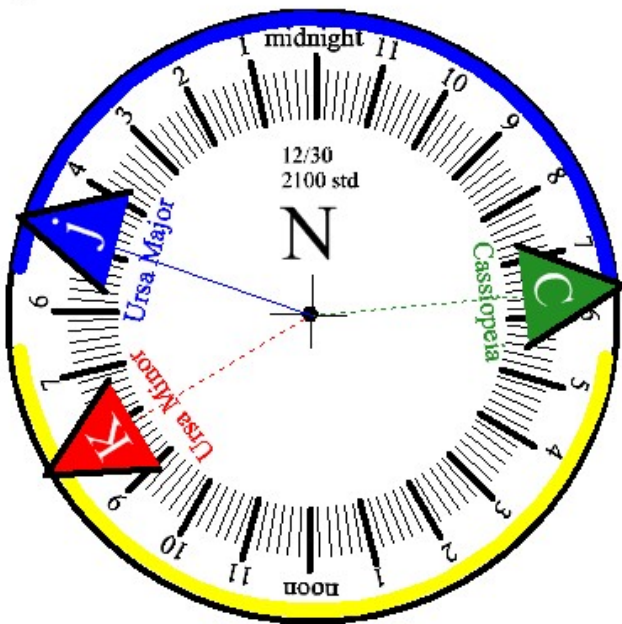
west facing



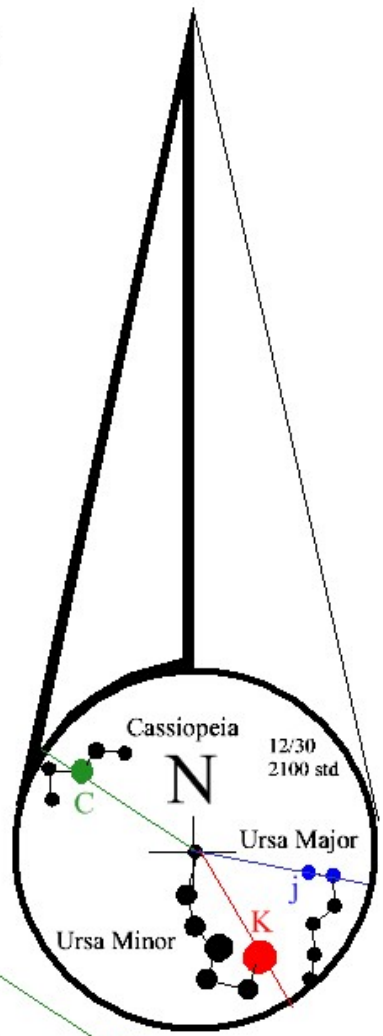
east facing



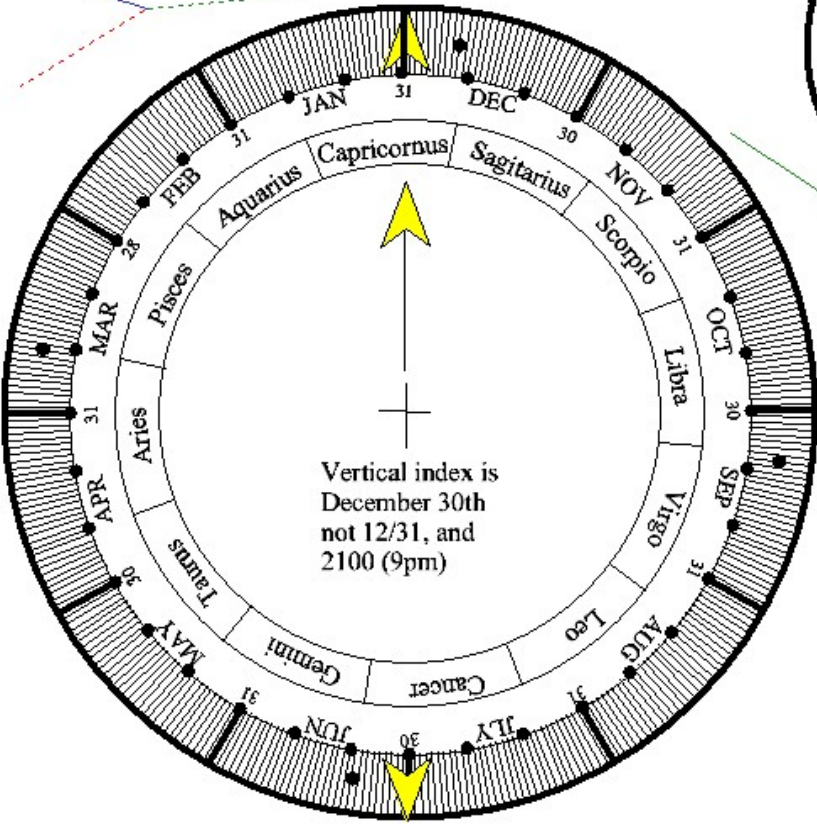
Cassiopea Nocturnal dial
 Little Dipper Nocturnal dial Big Dipper Nocturnal dial



The K, CA and j pointers are the mirror image of the actual star map layout (i.e. rotated 180 on its axis)



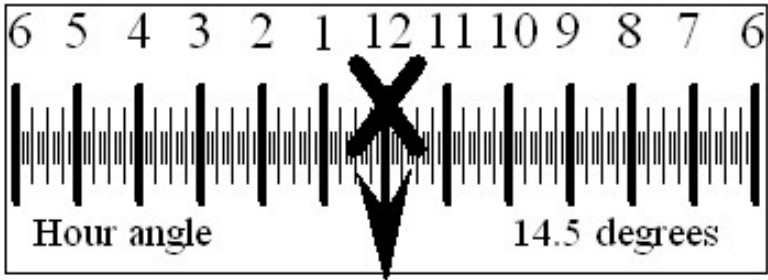
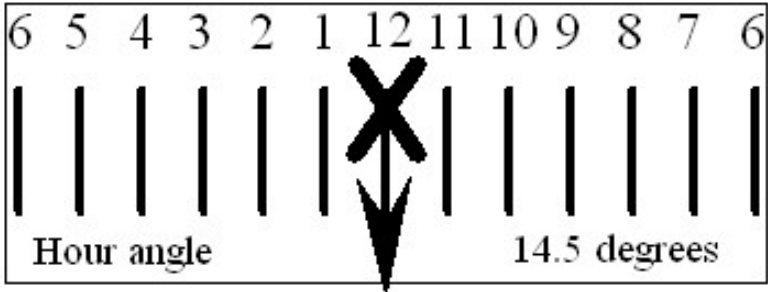
Outer disk is CD size



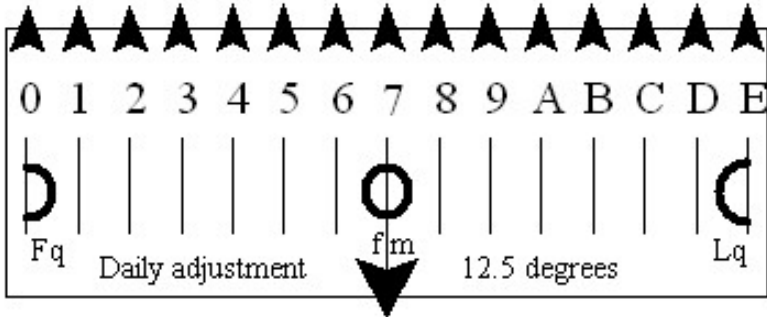
Star	Correction
C
K
j
Correction for star chart variance and observer longitude	

Rotate until a null shadow

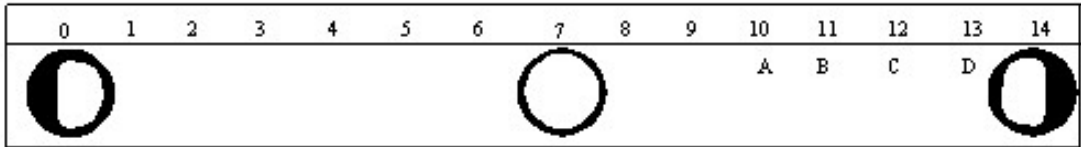
LUNAR DIAL A9.7



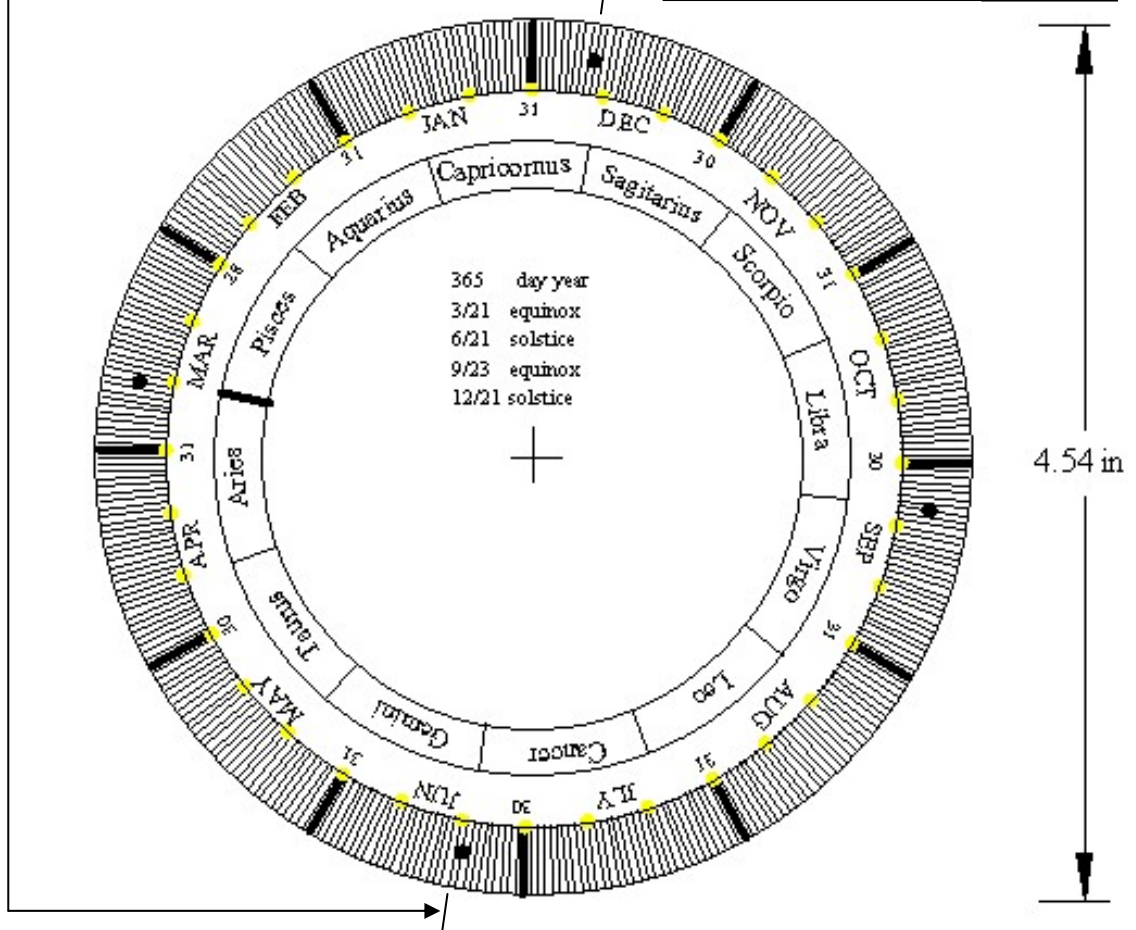
Outer diameter of pipe 2.25"
2.25 in
rescale as needed



Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun Mon



December 21 and June 21 are placed at the extremes of the canted section. **ECLIPTIC DIAL** **A9.8**



3.54 in

