

# Wooden Parts.

## Computation of End Plate dimensions

$$\log^{-1} 1.01294 = 10.302' = 10' - 3\frac{5}{8}"$$

$$\log \cos 22\frac{1}{2}^\circ = .96562$$

$$\log^{-1} 1.047304 = 11.151' = 11' - 1\frac{3}{16}"$$

$$\log \cos 11\frac{1}{4}^\circ = .99157$$

$$\log^{-1} 1.038874 = 10.9365 = 10' - 11\frac{1}{4}"$$

$$\begin{array}{r} 5\frac{5}{8}" \text{ width of } 2 \times 6 \\ \hline 11' - 4\frac{7}{8}" \text{ radius} \end{array}$$

$$1.047304$$

$$\log \sin 11\frac{1}{4}^\circ = .29024$$

$$\log^{-1} .337544 = 2.1754$$

2

$$4.3508 = 4' - 4\frac{3}{16}" \text{ minor cord}$$

$$1.00000$$

$$\log \tan 22\frac{1}{2}^\circ = .61722$$

$$\log^{-1} .61722 = 4.1421$$

2

$$8.2842 = 8' - 3\frac{7}{16}" \text{ major cord}$$

$$x + 2x \cos 30^\circ = 20.177' = \log^{-1} 1.304857 = 20' - 2\frac{1}{8}"$$

$$\log 2.73205 = .436488$$

$$x = 7.3853' = .868369$$

$$x \cos 30^\circ =$$

Drill holes  $\frac{17}{32}$ " dia for  $\frac{1}{32}$ " clearance