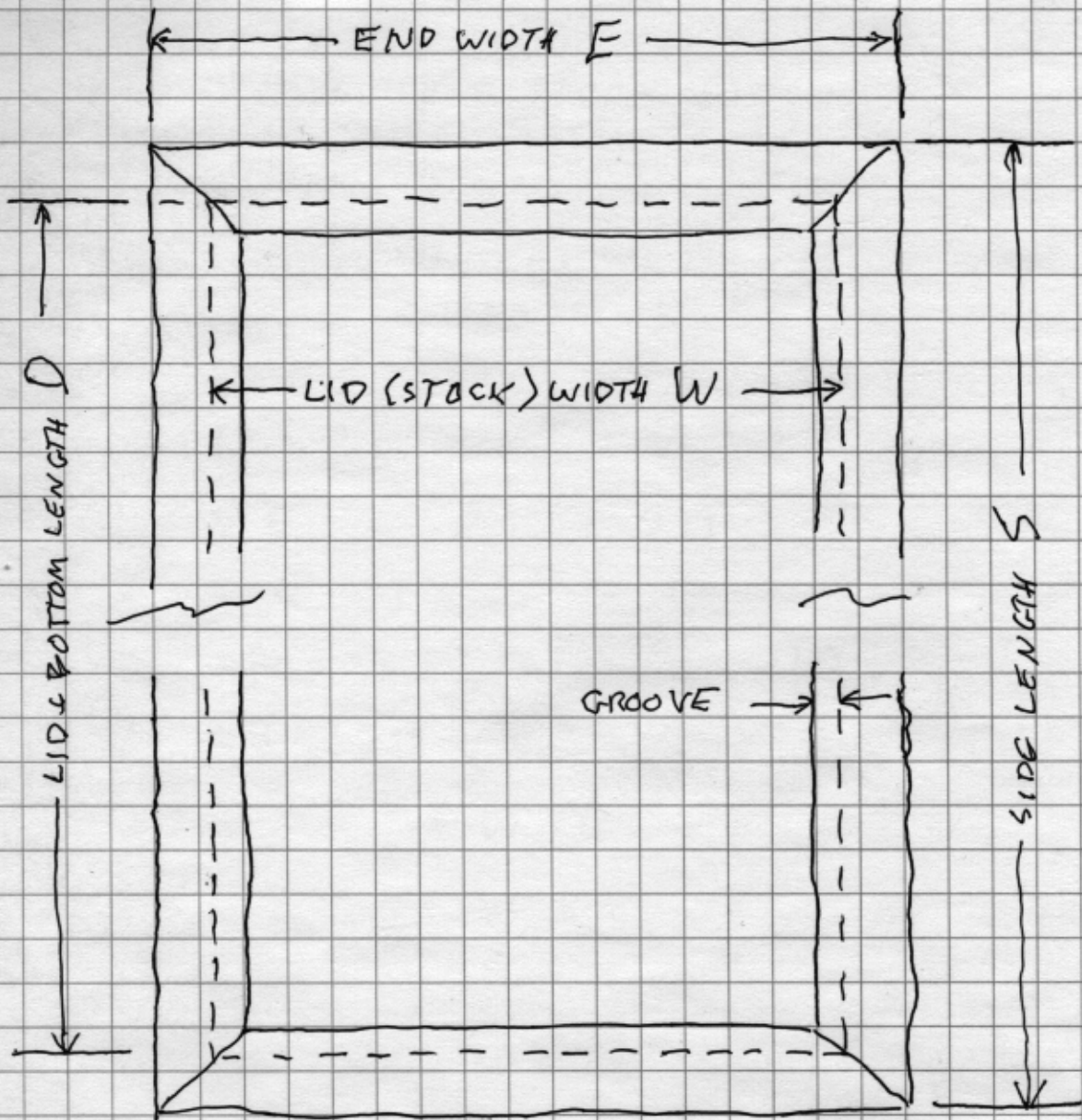


SLIDING LID BOX TOP VIEW



SIX PANELS NEED SIX SAW KERFS

NOTE: STANDARD PENCILS ARE $7\frac{1}{2}$ "

SLIDING LID BOX COMPONENTS

ASSUME:

BOX HEIGHT = STOCK WIDTH

LID + BOTTOM WIDTH = STOCK WIDTH

GROOVES FOR LID + BOTTOM = $\frac{1}{8}$ "

GIVEN:

STOCK - WIDTH W , LENGTH L , THICKNESS T

ALLOWANCE FOR GROOVES K

$$\text{END } E = W + 2\left(T - \frac{1}{8}\right) = W + 2T - \frac{1}{4} \quad \text{EQ1}$$

$$\text{SIDE } S = D + 2\left(T - \frac{1}{8}\right) = D + 2T - \frac{1}{4} \quad \text{EQ2}$$

$$\text{STOCK } L = 2E + 2S + 2D + K$$

$$\frac{L}{2} - \frac{K}{2} = E + S + D$$

$$= \left(W + 2T - \frac{1}{4}\right) + \left(D + 2T - \frac{1}{4}\right) + D$$

$$= W + 2D + 4T - \frac{1}{2}$$

$$2D = \frac{L}{2} - \frac{K}{2} - W - 4T + \frac{1}{2}$$

$$\text{LID LEN } D = \frac{L}{4} - \frac{K}{4} - \frac{W}{2} - 2T + \frac{1}{4} \quad \text{EQ3}$$

FOR STOCK $L = 40$ ", $W = 2\frac{1}{2}$ ", $T = \frac{5}{16}$ ", $K = 1$ "

$$\text{EQ1: END } E = 2\frac{1}{2} + \frac{5}{8} - \frac{1}{4} = 2\frac{7}{8}"$$

$$\text{EQ3: LID LEN } D = \frac{40}{4} - \frac{1}{4} - \frac{2\frac{1}{2}}{2} - \frac{5}{8} + \frac{1}{4} = 8\frac{1}{8}"$$

$$\text{EQ2: SIDE LEN } S = 8\frac{1}{8} + \frac{5}{8} - \frac{1}{4} = 8\frac{1}{2}"$$

$$\text{SPACER} = \text{SIDE } S - \text{END } E = 8\frac{1}{2}" - 2\frac{7}{8}" = 5\frac{5}{8}"$$