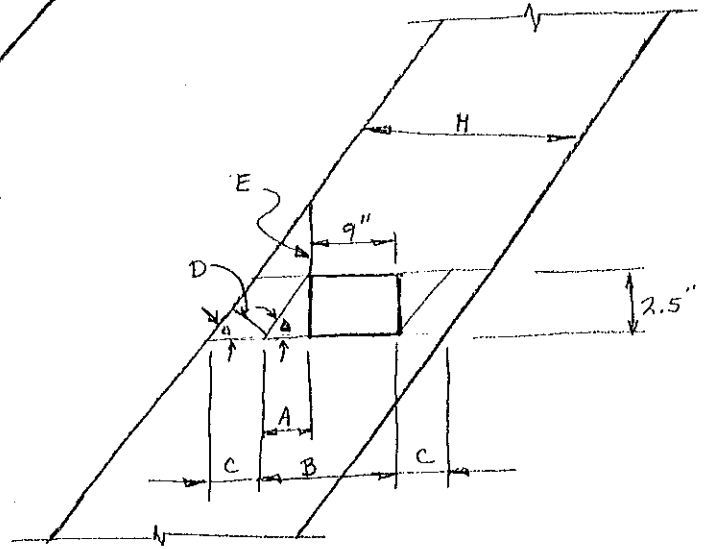
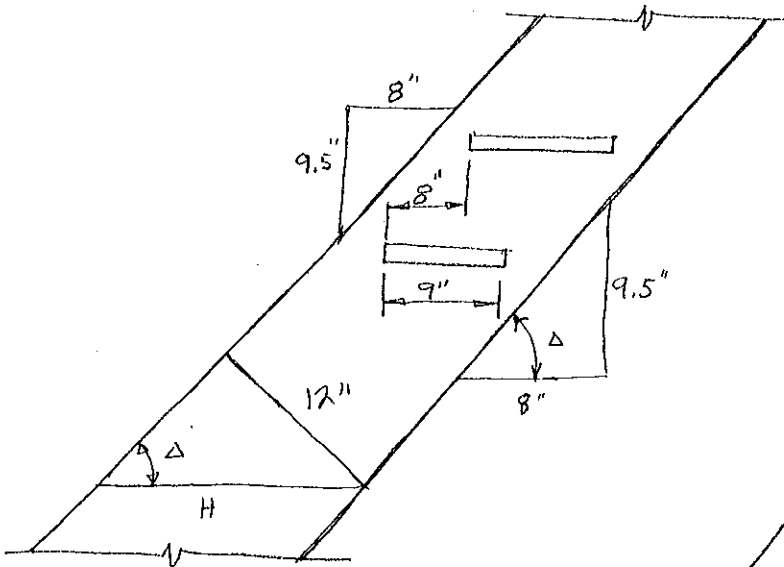


STAIR & STRINGER DIMENSIONS



$$\text{RISE} = 9.5''$$

$$\text{RUN} = 8''$$

$$\tan \Delta = \frac{9.5}{8}$$

$$H \sin(\tan^{-1} \frac{9.5}{8}) = 12$$

$$H = \frac{12''}{\sin(\tan^{-1} \frac{9.5}{8})} = 15.69'' \quad \text{①}$$

↑
STRINGER DEPTH

$$A = \frac{2.5''}{\tan \Delta} = 2.11'' \quad \left\{ \begin{array}{l} \text{ALSO} = 2.5'' \left(\frac{8''}{9.5''} \right) \\ \text{②} \quad \quad \quad = 2.11 \end{array} \right.$$

$$B = A + 9'' = 11.11'' \quad \text{③}$$

$$C = \frac{H - B}{2} = \frac{15.69 - 11.11}{2} = 2.29'' \quad \text{④}$$

OR = AS SPECIFIED

$$D = C \sin \Delta$$

$$= C \sin(\tan^{-1} \frac{9.5}{8}) = 1.75''$$

$$E = \frac{9.5''}{8''} (C) = \frac{9.5}{8} \times 2.29 = 2.72''$$

FOR A GIVEN D,

$$C \sin \Delta = D$$

$$C = \frac{D}{\sin \Delta}$$

$$= \frac{D}{\sin(\tan^{-1} \frac{9.5}{8})}$$

