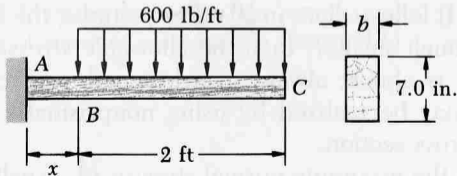


**7.124 and 7.125** For the beam and loading shown, determine the width  $b$  of the beam and the distance  $x$  for which the maximum normal stress  $\sigma_m$  and the maximum shearing stress  $\tau_m$  in the beam are simultaneously equal to

$$\sigma_{\text{all}} = 1600 \text{ psi} \quad \tau_{\text{all}} = 110 \text{ psi}$$



**Fig. P7.124**