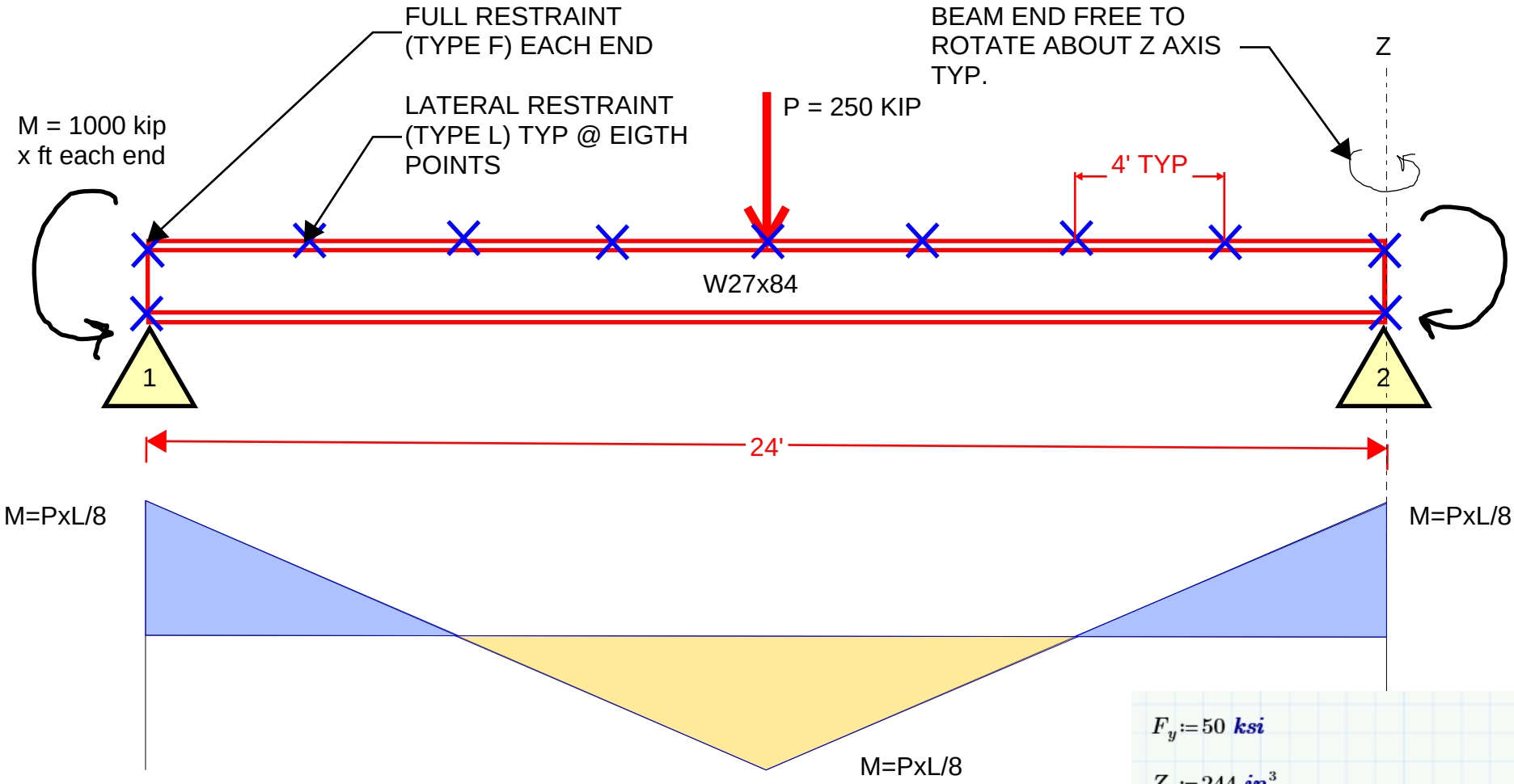

$F_y := 50\ ksi$

$Z_x := 244\ in^3$

$M_p := Z_x \cdot F_y = (1.017 \cdot 10^3)\ kip \cdot ft$

$L := 32\ ft$

$P := \frac{8 \cdot M_p}{L} = 254.167\ kip$

$P := 250\ kip$

$M := \frac{P \cdot L}{8} = 1000\ kip \cdot ft$