



DOMEX 100XF
TENSILE STRENGTH 110000PSI
YIELD STRENGTH 100000PSI
YIELD STRENGTH WITH SAFETY FACTOR 3 33333PSI
YIELD STRENGTH SHEAR 100000*.60/3 = 20000PSI
P = -575.103 - 508.986 = -1084.09#
SHEAR@ E = 3061.24#



P = -575.103 - 508.986 = -1084.09#
M = -31636.3#



P = -575.103 - 508.986 = -1084.09#
1" AWAY FROM g M = -2738.74#

$$R = S_t$$

$$1084.09\# = S_t = 723\text{PSI}$$

$$1.50\text{IN}^2 = S_t = 723\text{PSI}$$

$\tau_{ou} = 1.50\sqrt{v}/(2+1)$
V = SHEAR FORCE
H = TWO-CENTROID TO EXTREME FIBER
t = WALL THICKNESS

$$1.50 \times 3061.24\# = \tau_{ou} = 3499\text{PSI}$$

THE SHAPE SHOWN WILL WORK
WITH A WALL THICKNESS OF 3/16"

$$R \pm M_C = S_t$$

$$-1084.09\# \pm \frac{-31636.3\# \times 3.77"}{12.63\text{IN}^2} = S_t$$

$$370\text{PSI} + 9443\text{PSI} = 9813\text{PSI}$$

THE SHAPE SHOWN WILL WORK
WITH A WALL THICKNESS OF 3/16"

$$R \pm M_C = S_t$$

$$-1084.09\# \pm \frac{-2738.74\# \times 2.83"}{5.14\text{IN}^2} = S_t$$

$$482\text{PSI} + 1508\text{PSI} = 1990\text{PSI}$$

THE SHAPE SHOWN WILL WORK
WITH A WALL THICKNESS OF 3/16"

