



Service loads

* N/S wind

$$\bullet M = (144\#/ft)(47')^2/8 = 39762\text{ ft}\cdot\#$$

$$\rightarrow \div (15.5') = 2565\# = \text{Chord Force}$$

$$\bullet V = (144\#/ft)(47')/2 = 3384\#$$

$$\rightarrow \div (15.5') = 218\#/ft = V = \text{unit shear}$$

* E/W wind

$$\bullet M = (259\#/ft)(15.5')^2/8 = 7778\text{ ft}\cdot\#$$

$$\rightarrow \div (47') = 165\# = \text{Chord Force}$$

$$\bullet V = (259\#/ft)(15.5')/2 = 2007\#$$

$$\rightarrow \div (47') = 43\#/ft = V = \text{unit shear}$$