

Fig. 3

$$f = P/A \pm (M_x/I_x)y \pm (M_y/I_y)x$$

$$P = 800 \text{ kN}$$

$$A = 0.72 \text{ m}^2$$

$$M_x = 480 \text{ kN-m}$$

$$I_x = 0.0864 \text{ m}^4$$

$$M_y = 240 \text{ kN-m}$$

$$I_y = 0.0216 \text{ m}^4$$

$$f_{+x+y} = 7778 \text{ kPa} \quad \text{Compression}$$

$$x = 0.3 \text{ m}$$

$$y = 0.6 \text{ m}$$

$$f_{-x+y} = 1111 \text{ kPa}$$

$$x = -0.3 \text{ m}$$

$$y = 0.6 \text{ m}$$

$$f_{-x-y} = -5556 \text{ kPa}$$

$$x = -0.3 \text{ m}$$

$$y = -0.6 \text{ m}$$

$$f_{+x-y} = 1111 \text{ kPa}$$

$$x = 0.3 \text{ m}$$

$$y = -0.6 \text{ m}$$

Tension  
Compression

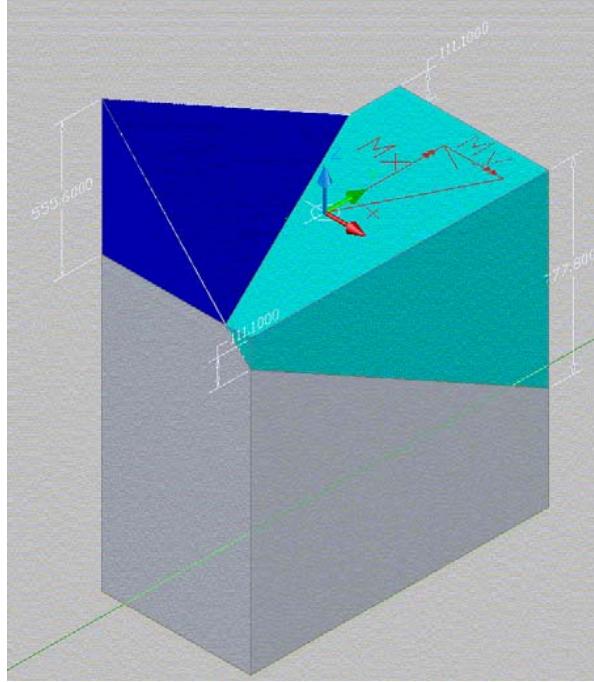


Figure 4. Isometric view of stresses

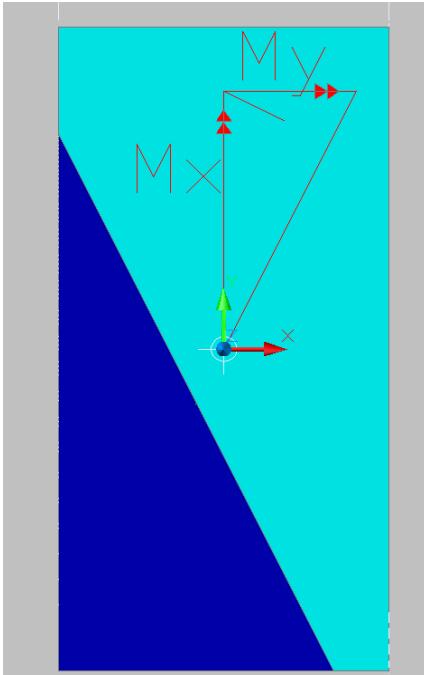


Figure 5. Plan view of stresses

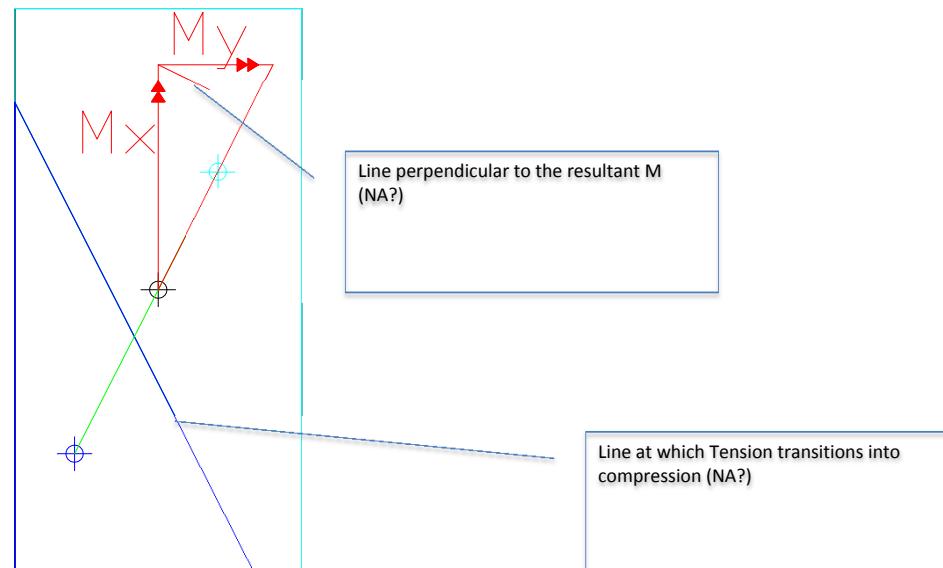


Figure 6. Plan view of stresses not shaded