Remarks: See §4.6, pages. 184 till 186
See §4.10.2, pages. 215 till 219

Answer:

$\sigma_A = 0$

Explanation:

There is bending in the tapered column shown in the left figure.
For the cross-section at the place of A, the ground section, the normal center is in the middle (At the intersection point of the symmetric axes)

Cross-sectional properties:

$A = 120\times10^3 \text{ mm}^2$ And $W = 12\times10^6 \text{ mm}^3$

Normal force and moment at the section:

$N = -240 \text{ kN}$

$M = |Ne| = \left|(-240 \text{ kN})\left\{\frac{0{,}600 \text{ m}}{2} - (0{,}200 \text{ m})\right\}\right| = 24 \text{ kNm}$ (( )

M causes tension on the left (in A) and compression on the right

$$\sigma_A = -\frac{240\times10^3 \text{ N}}{120\times10^3 \text{ mm}^2} + \frac{24\times10^6 \text{ Nmm}}{12\times10^6 \text{ mm}^3} = 0$$