



Torsion - Rectangular Prism

Nomenclature

τ_{ij}
 ↑ ↘
 Normal direction
 to surface of stress

$$\sum F_x = 0 \quad \tau_{zx\text{Top}} = \tau_{zx\text{Bot}} = \tau_{zx}$$

$$\sum F_y = 0 \quad \tau_{xz} = \tau_{yz}$$

$$\sum M_y = d_z \times \tau_{zx\text{Top}} = 0$$

$\tau_{zx\text{Top}} = 0$

$$\sum M_{x_1} = d_z \times \tau_{zy\text{Top}} = 0$$

$\tau_{zy\text{Top}} = 0$