

Opmerkingen: Zie §3.2.4, voorbeeld 5, blz. 99 t/m 103
 Zie §4.9, blz. 183 t/m 187

Antwoorden:

a. $W_{z;o} = \frac{1}{12}bh^2$

b. $W_{z;b} = \frac{1}{24}bh^2$

c. $k_b = \frac{1}{6}h$

d. $k_o = \frac{1}{12}h$

Toelichting:

$$I_{zz} = \frac{1}{36}bh^2$$

a. $W_{z;o} = \frac{I_{zz}}{e_o} = \frac{\frac{1}{36}bh^2}{\frac{1}{3}h} = \frac{1}{12}bh^2$

b. $W_{z;b} = \frac{I_{zz}}{e_b} = \frac{\frac{1}{36}bh^2}{\frac{2}{3}h} = \frac{1}{24}bh^2$

c. $k_b = \frac{W_{z;o}}{A} = \frac{\frac{1}{12}bh^2}{\frac{1}{2}bh} = \frac{1}{6}h$

d. $k_o = \frac{W_{z;b}}{A} = \frac{\frac{1}{24}bh^2}{\frac{1}{2}bh} = \frac{1}{12}h$