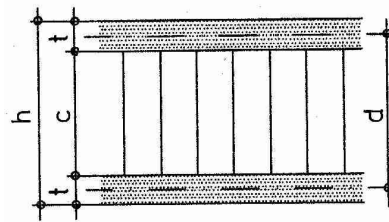


Bending resistance of sandwich panels

According to DIN 53 293 the bending resistance of sandwich panels is calculated as follows:

$$d = \frac{h + c}{2}$$

- d= average panel thickness in mm
- h= total panel thickness in mm
- c= thickness of honeycomb in mm



Moment of inertia *J* in *mm<sup>4</sup>*

$$J = \frac{b * t * d^2}{2}$$

- b= panel width in mm
- t= skin thickness in mm
- d= average panel thickness in mm

Theoretical bending resistance in *Nmm<sup>2</sup>*

$$E * J$$

- J = moment of inertia in *mm<sup>4</sup>*
- E = modulus of elasticity in *N/mm<sup>2</sup>*
- E<sub>aluminium</sub> = 70000 *N/mm<sup>2</sup>*
- E<sub>glass epoxy</sub> = 23000 *N/mm<sup>2</sup>*