

[Remarks:](#) See § 4.4, pages 168 till 170

[Hints:](#)

Calculate the location of the normal centre NC.

The sign of the stress at the NC is the sign of the normal force  $N$ .

[Answer 4.16-1:](#)

f

[Explanation:](#)

NC is in the web  $\Rightarrow N$  is negative (compressive force)

Without  $N$ : tension above/compression below  $\Rightarrow M \frown$

[Answer 4.16-2:](#)

c

[Explanation:](#)

NC is 20 mm from the bottom of the cross-section  $\Rightarrow N$  is positive (tensional force)

Without  $N$ : tension below/compression above  $\Rightarrow M \smile$