

 **This page is not fully translated, yet. Please help completing the translation.**  
*(remove this paragraph once the translation is finished)*

# Module „CLT-Plate 1D - Internal forces“



## Input data

The input is divided into:

- definitions of the cross section
- specifications concerning structural fire design
- internal forces according to the theory (of 1<sup>st</sup> or 2<sup>nd</sup> order) on which the calculations are based on
- design factors
- specifications concerning stability

## Cross section

See [Module CLT-Plate 1D - Continuous beam](#)

## Fire

See [Module CLT-Plate 1D - Continuous beam](#)

## Type of calculation, internal forces, design factors and specifications concerning stability

The internal forces and the underlying type of calculation are defined in the tab „Internal forces, stresses and utilisation ratios“. Additionally, the design values are specified here.

If the internal forces result from a calculation based on a first order analysis a substitute buckling length has to be stated in case of a negative normal force ("problem of stability"). Based on this buckling length and the respective cross section the required buckling factor  $k_c$  needed for the verification is calculated automatically.



## Results and output

## Cross section values

See [Module CLT-Plate 1D - Continuous beam](#)

### Summary of the results

The stress distributions and the governing utilisation ratios are shown in the tab "Internal forces, stresses and utilisation ratios".



### Ergebnisse im Detail

Über den Button „Details“ können die Spannungen und Ausnutzungsgrade der einzelnen Schichten betrachtet werden.



From:  
<https://www.ihbv.at/wiki/> - **IHBV Wiki**

Permanent link:  
[https://www.ihbv.at/wiki/doku.php?id=en:clt:hotspot:software:cltdesigner:manual:modul\\_plate1d\\_internalforces&rev=1510762629](https://www.ihbv.at/wiki/doku.php?id=en:clt:hotspot:software:cltdesigner:manual:modul_plate1d_internalforces&rev=1510762629)

Last update: **2019/02/21 10:31**  
Printed on 2025/09/19 15:59