

ST13

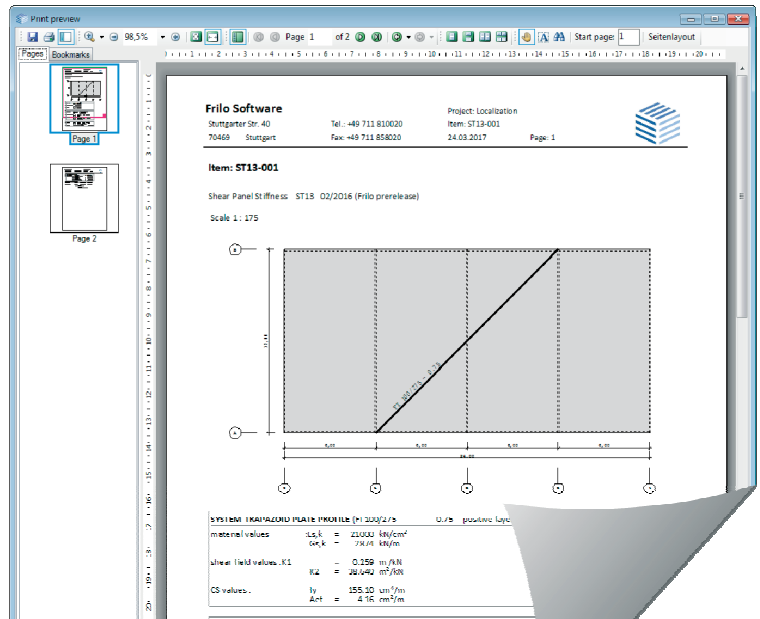
Shear Panel Stiffness

ST13 is a software application for the calculation of shear spring stiffness and the torsional spring stiffness of trapezoidal sheets in accordance with DIN 18800.

Direct selection of trapezoidal sheet profiles from a dedicated file.

When the user defines the load on top, the fastening and the joint stiffness, the system calculates the foundations.

The shear field calculation as well as the translational spring stiffness and the torsional spring stiffness of trapezoidal sheets are of high importance for the verification of the stability against lateral torsional buckling in accordance with DIN 18800. The application does not only calculate the values but also verifies whether the fixity against lateral shift and/or torsion is sufficient in accordance with DIN 18800-2 EI 308 or 309. You can transfer the values directly to the BTII application (Second Order Bending Torsion Theory).



System input

- Cross-section STP
 - CS - beam
 - Material - beam
 - Fastening - TPP
- Parameters
 - Shear field found.
 - Rotary found.
- Remarks
- Calculate
- Output
 - Output design
 - System graphic
 - Remarks
 - System-trapez. pl.
 - System-beam
 - System-shear f.
 - Results
 - Word
 - Screen
 - Printer

Shear field

Trapez. plate pr. (positive position)

Beam cr section

Loading

Number fields n= Slk

Span length l0= m

Height of field Hs= m

Shear field from to

Foundation constants

Shear field found. S= kN

Transf foundation c_y= kN/m²

Rotary found. c_{theta}= kN/r/m

verification of sufficient obstruction...

of lat. displacem. S min= < S vorh

of rotation (E-C) c_{theta} min= < c_{theta} exist

of rotation (E-P) c_{theta} min= < c_{theta} exist

Text output

Select a steel trapezoid plate profil. (F5 or click on button '>>')

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