Application of fullthread screws

1

e.g. for crane runway (blue steel I-profile):

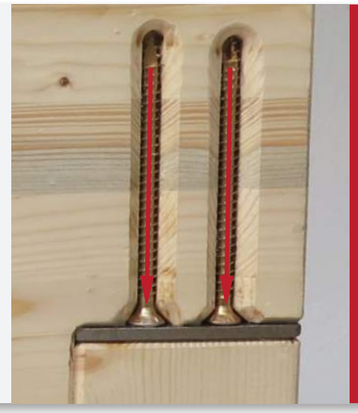
the vertical load (red arrow) has the distance e to the joint. Thus a tilting moment M arises.

The horizontal screw absorbs that tilting effect.

The vertical load will be absorbed by the transversal fasteners.

support reinforcement with sheet steel for load distribution

The pressure will be transferred to the sheet steel by the screw heads. And from there, the pressure is equal transferred distributed onto the end grain.



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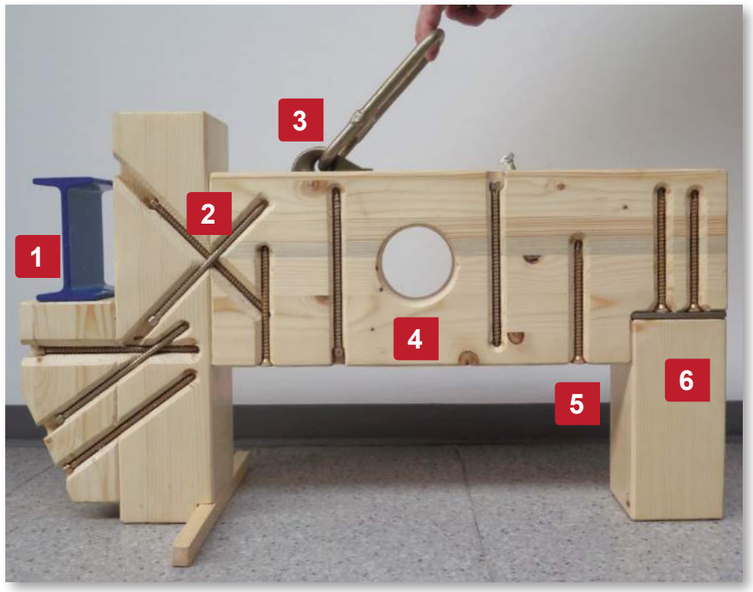
2

Joint of secondary beam to column (main beam) with cross-wise screwings:

Values for calculation and positioning od the screws are listed in our data sheets.

tip: at first, use of washer head screws for a tightly closed joint.

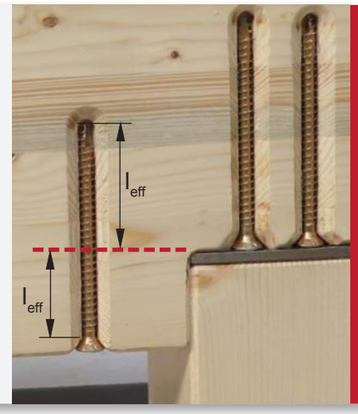
The higher the screwcross is arranged, the more critical is that area and a reinforcement of the grain tensile stress perpendicular to the grain is required.



reinforcement of the grain tensile stress perpendicular to the grain at notches:

The requirement has to be checked by a structural engineer.

If the grain tensile stress perpendicular to the grain is too high for the timber crossection, fullthread screws can reinforce the beam in the area of the green line.



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3

Liftig system RAPID® T-Lift

left side:
milled sphere for the absorbtion of the horizontal load

right side:
the screw direction must be adjusted according to the hanger. the highest lifting weight is obtained with screws in hanger direction.

Reinforcement of break-throughs

Long fullthread screws with cylinder head are exactly positioned with long bits.

reinforcement of the grain tensile stress perpendicular to the grain:
in the area with danger of tearing, the thread length l_{eff} above and underneath the break-through needs to be approx. equally long.

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