

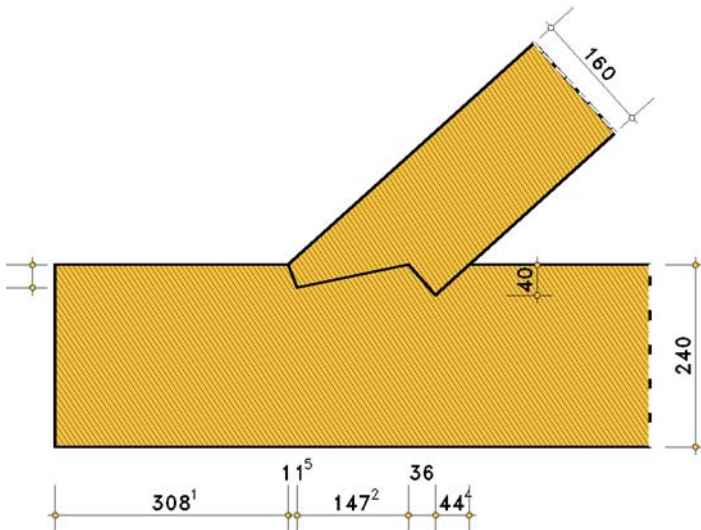
1. Input parameters

1.1. double offset acc. to DIN EN 1995-1-1/NA:2013-08, NCI NA.12.1

1.2. material and dimensions

both beams from solid coniferous timber, C30 (S13) , $\rho_k = 380 \text{ kg/m}^3$, NKL 1
 $f_{m,k} = 30.00 \text{ N/mm}^2$, $f_{t,k} = 18.00 \text{ N/mm}^2$, $f_{c,k} = 23.00 \text{ N/mm}^2$, $f_{v,k} = 4.00 \text{ N/mm}^2$, $f_{c90,k} = 2.70 \text{ N/mm}^2$
 sole plate 160/240 mm, strut 160/160 mm, $\gamma = 42.0^\circ$
 anchoring by bolt $\varnothing 16 \text{ mm}$

elevation scale 1:100, unit of length [mm]



1.3. internal forces and moments

Nr.	name	N _d kN	KLED	k _{mod} -	γ -
1	A	84.69	med.-term	0.800	1.30

2. results

2.1. compression in contact surfaces acc. to DIN EN 1995-1-1/NA, NCI NA.12.1

$k_{cr} = 0.500$, $\alpha = \gamma/2 = 21.0^\circ$, $\min l_v = 320 \text{ mm}$

Nr	$f_{v,d}$ N/mm ²	$f_{c0,d}$ N/mm ²	$f_{c90,d}$ N/mm ²	$f_{c\alpha 1,d}$ N/mm ²	$f_{c\alpha 2,d}$ N/mm ²	S _{1R,d} kN	S _{2R,d} kN	l _{v1} mm	l _{v2} mm	u _{1v} -	u _{SE,d1} -	u -
1	2.46	14.15	1.66	10.05	5.79	55.34	49.82	209	320	0.999	0.805	0.999

$u_{max} = 0.999 \leq 1 \Rightarrow \text{ok.}$

3. Summary

total utilization all verifications $u_{max,Ges} = 0.999 \leq 1 \Rightarrow \text{ok.}$