

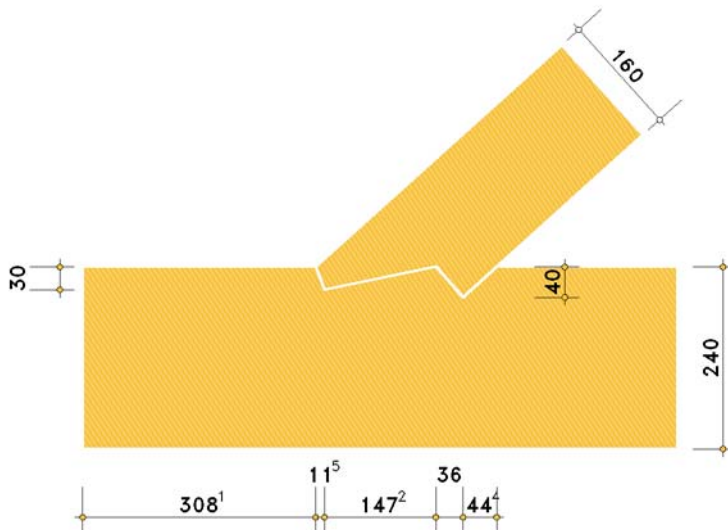
1. Input parameters

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
 $f_{m,k} = 30.00 \text{ N/mm}^2$, $f_{t,k} = 19.00 \text{ N/mm}^2$, $f_{c,k} = 24.00 \text{ N/mm}^2$, $f_{v,k} = 4.00 \text{ N/mm}^2$, $f_{c90,k} = 2.70 \text{ N/mm}^2$
 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	Nd kN	KLED	kmod	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	$f_{c\alpha1,d}$ N/mm ²	$f_{c\alpha2,d}$ N/mm ²	$S_{1R,d}$ kN	$S_{2R,d}$ kN	l_{v1} mm	l_{v2} mm	u_{1v} -	USE,d1 -	u -
1	2.46	14.77	1.66	10.21	5.80	56.22	49.93	212	320	1.000	0.798	1.000

$u_{max} = 1.000 \leq 1 \Rightarrow \text{ok.}$

3. Summary

total utilization all verifications $u_{max,Ges} = 1.000 \leq 1 \Rightarrow \text{ok.}$