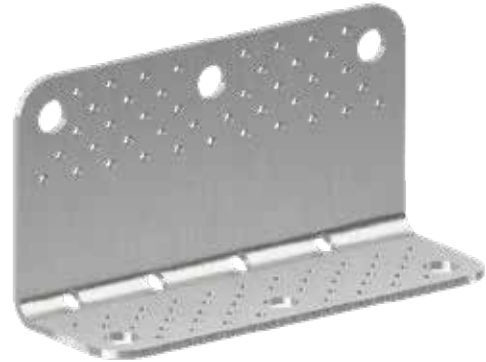


# PRODUCT DATA SHEET

## CLT SYSTEM ANGLE

### PRODUCT DESCRIPTION

The CLT system angle is ideally suited for **use in solid wood construction**. The scope of application is **limited to the use of CLT** (Cross-Laminated Timber). The solid construction allows it to **transmit major forces**. Unlike the standard angles, the CLT system angle can be **combined with our IdeeFix**. This makes it possible to construct **complex connections**.



### ADVANTAGES

- Variable applications
- High load-bearing capacity
- Compatible with SK04

### CERTIFICATION



### IMAGES OF APPLICATIONS



Application with IdeeFix, Metric bolt, KonstruX



Application with Angle-bracket screw, KonstruX

# PRODUCT DATA SHEET

# CLT SYSTEM ANGLE

## MATERIAL

- S250 galvanized

## PRODUCT TABLE

Art. no.	Designation	Height [mm]	Length [mm]	Width [mm]	Material	Material thickness [mm]	PU
954180	CLT system angle	120	230	80	S250 galvanized	4	1

## CONNECTION WITH CLT SYSTEM BRACKET

KonstruX 10 x 125 without drill point												
Vertical leg connection Angle-bracket screw Ø 5 mm n=43	5,0 x 40	5,0 x 50	5,0 x 60	5,0 x 70	5,0 x 40	5,0 x 50	5,0 x 60	5,0 x 70	5,0 x 40	5,0 x 50	5,0 x 60	5,0 x 70
Horizontal leg connection	WBS 5,0 x 40 n=43	WBS 5,0 x 50 n=43	WBS 5,0 x 60 n=43	WBS 5,0 x 70 n=43	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=3	M16 8.8 n=3	M16 8.8 n=3	M16 8.8 n=3	M16 8.8 n=3
KonstruX 10 x 125 n=4												
$F_{1, \text{kk pull}}$	55,8 kN	62,4 kN	69,1 kN	75,7 kN	43,1 kN	43,1 kN	43,1 kN	43,1 kN	43,1 kN	43,1 kN	43,1 kN	43,1 kN
$F_{23, \text{kk}}$	49,1 kN	58,3 kN	62,1 kN	66,0 kN	49,1 kN	55,9 kN	55,9 kN	55,9 kN	49,1 kN	58,3 kN	62,1 kN 60,5 kN	66,0 kN 60,5 kN
$F_{5, \text{kk pull}} \perp$ on CLT	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN	6,9 kN

# PRODUCT DATA SHEET

# CLT SYSTEM ANGLE

## CONNECTION WITH CLT SYSTEM BRACKET

KonstruX 10 x 125 without drill point						
Vertical leg connection	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=2	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=2	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=2
Horizontal leg connection	Angle-bracket screw 5,0 x 40;50;60;70 n=43	Angle-bracket screw 5,0 x 40;50;60;70 n=43	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=2	M16 8.8 n=3	M16 8.8 n=2
KonstruX 10 x 125 n=4						
$F_{1, Rk}$ pull	43,1 kN	29,9 kN	43,1 kN	29,9 kN	43,1 kN	29,9 kN
$F_{23, Rk}$	26,0 kN	22,3 kN	26,0 kN	22,3 kN	26,0 kN	22,3 kN
$F_{5, Rk}$ pull $\perp$ on CLT	4,8 kN	4,8 kN	4,8 kN	4,8 kN	4,8 kN	4,8 kN

KonstruX 10 x 125 without drill point						
Vertical leg connection	M16 8.8 n=3	M16 8.8 n=2	M16 8.8 n=3	M16 8.8 n=2	M16 8.8 n=3	M16 8.8 n=2
Horizontal leg connection	Angle-bracket screw 5,0 x 40;50;60;70 n=43	Angle-bracket screw 5,0 x 40;50;60;70 n=43	IdeeFix Ø 40 n=3	IdeeFix Ø 40 n=2	M16 8.8 n=3	M16 8.8 n=2
KonstruX 10 x 125 n=4						
$F_{1, Rk}$ pull	43,1 kN	43,1 kN	43,1 kN	29,9 kN	43,1 kN	43,1 kN 36,7 kN
$F_{23, Rk}$	34,4 kN 29,3 kN	29,6 kN 25,2 kN	34,4 kN 29,3 kN	29,6 kN 25,2 kN	34,4 kN 29,3 kN	29,6 kN 25,2 kN
$F_{5, Rk}$ pull $\perp$ on CLT	4,8 kN	4,8 kN	4,8 kN	4,8 kN	4,8 kN	4,8 kN

$F_{4, Rk} = 54$  kN pressure  $\perp$  on CLT; independent of connections.

For connections with M16 8.8 if bolt head or nut is not located on CLT: Washer with  $d_w = 40$ mm.

$\rho_k = 350$  kg/m<sup>3</sup> conservative for some approved cross-laminated timber, increase of load-bearing capacities according to ETA-19/0020 with  $k_{dens} = \left( \frac{\rho_k}{350 \text{ kg/m}^3} \right)^{0.5}$  possible.

The construction of the supporting structure should prevent the twisting of the cross laminated timber components.

In case of connection with CLT system angles on both sides, the values of this table may be applied for each of the two angles. The values for F23, Rk only change for the connection with M16 screws.

In other words, the values in italics must be used if CLT system brackets are fitted to the top and bottom of the ceiling.

If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (technik@eurotec.team).