

Connectors - Sherpa CLT

SPECIAL ORDER

Product information

The SHERPA CLT connector is a coupling element for angle joints, t-joints and longitudinal joints, wall to ceiling connections, as well as ceiling joints.

Optimised for three-layer and five-layer cross-laminated timber elements, the SHERPA CLT connector can be mounted flush in solid timber or glulam already in the preinstallation phase, enabling ready-for-installation delivery to the construction site.

The CLT connector must be milled flush into cross laminated timber or glulam. The load capacity according to ETA can only be guaranteed when using SHERPA special screws.

Advantages

- Multifunctional in strength and use
- Quality reliability through the system
- Can be combined with sound-proofing
- Pre-assembled for optimal assembly
- Complete element screwing from the inside

Connector Requirement Per Connection

Wall - Wall	1 - 2 pcs / lfm
Ceiling - Wall	2 - 3 pcs / lfm
Ceiling - Ceiling	2 - 3 pcs / lfm

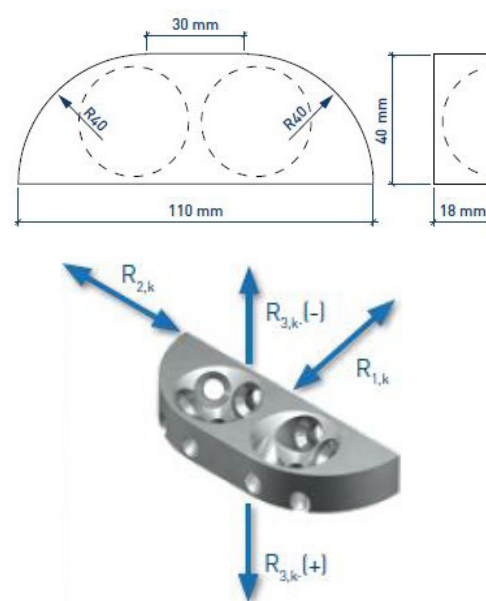
Sherpa Screws Required Per Connector

8 pcs 8.0 x 100 / 120 / 140mm
2 pcs 6.5 x 65mm

Configuration			Characteristic value ¹		
			Interlayer ≤ 12mm	Compriband ≤ 2mm	
Normal forces	Carrying capacity	$R_{1,k}$	18.80 ²		kN
	Stiffness	K_{ser}	9.750		N/mm
Shear force on the surface	Carrying capacity	$R_{2,k}$	10.00 ²		kN
	Stiffness	K_{ser}	3.300		N/mm
Shear force from the surface (positive)	Carrying capacity	$R_{3,k} [+]$	16.00 ²	16.50 ²	kN
	Stiffness	K_{ser}	3.600		N/mm
Shear force from the surface (negative)	Carrying capacity	$R_{3,k} [-]$	5.30	7.00	kN
	Stiffness	K_{ser}	870	1.000	N/mm

¹ ETA 18/0083

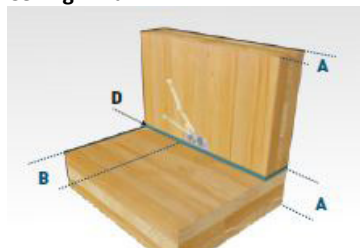
² screw l = 120mm: $n_s = 1.22$ screw l = 140mm: $n_s = 1.44$ $R'_k = N_s \cdot R_k$



Wall - Wall



Ceiling - Wall



Ceiling - Ceiling



A material thickness: 80 to 160mm;

> 120mm: flush milling or install both-sided

B edge distance: min 250mm

C min 100mm

Installation Instructions

- Milling: 18mm into solid timber or glulam
- Max distance between CLT connectors: $e_{max} = 2m$
- 2 pcs special screws 6.5 x 65
- 4 pcs special screws 8.0 x 100 / 120 / 140 (fix to solid timber / glulam)
- 4 pcs special screws 8.0 x 100 / 120 / 140 (mount on the second element)

D Interlayer (eg Regufoam): max 12mm

Compression hardness: min 0.2 N/mm²

Static elasticity modulus: min 1.0 N/mm²

Recommended Screw Torque

Sherpa special screws

6.5 x 65mm $M_T = 2.5 \text{ Nm}$

8.0 x 100mm $M_T = 5.0 \text{ Nm}$

Min: screw head must be in contact with counter sink