

PRODUCT DATA SHEET

TRILIFT LIFTING ANCHOR

PRODUCT DESCRIPTION

The Trilift lifting anchor is a transport solution that has been specially developed for anchoring slim 80 mm CLT elements that can still move heavy loads. The Trilift makes use of the high pull-out resistance of the KonstruX fully threaded screw and is designed in such a way that centre and edge distances are maintained without any problems. An eye bolt (not included in the scope of delivery) can be easily and securely screwed into the M27 internal thread. The set contains both the anchor and all the necessary screws.



ADVANTAGES / SPECIFICATIONS

- Trouble-free operation with wall or component thicknesses of 80 mm or more.
- High force absorption despite the small installation space.
- Easy preparation of the component during timber frame construction.
- Easy to assemble – insert, screw in the screws and you're done.
- Flush with the component edge, which allows it to remain inserted.



Notes

The eyebolt for the M27 internal thread is not included in the scope of delivery.

CONTENTS

- 1x transport anchor cylinder
- 4x KonstruX ST SK Ø 6.5 x 140
- 2x KonstruX ST SK Ø 8 x 245

PRODUCT TABLE

Trilift lifting anchor			
Art. no.	Dimension ^{a)} [mm]	Material	PU
954189	150 x 60 x 50	Steel – S235JR	1

a) Length x width x height

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TECHNICAL INFORMATION

CLT panel wall – raising

CLT panel wall – raising				
Fastening point	Screw image and installation angle		Stop angle	Total load bearing capacity [kg]
	90°	30°		
Narrow-edged front side	2 x KonstruX 8 x 245 mm	6 x KonstruX 6.5 x 140 mm	0	with 2 legs
			30°	380
			45°	450
			60°	490
			75°	500
			B	with n legs
			90°	n x 255

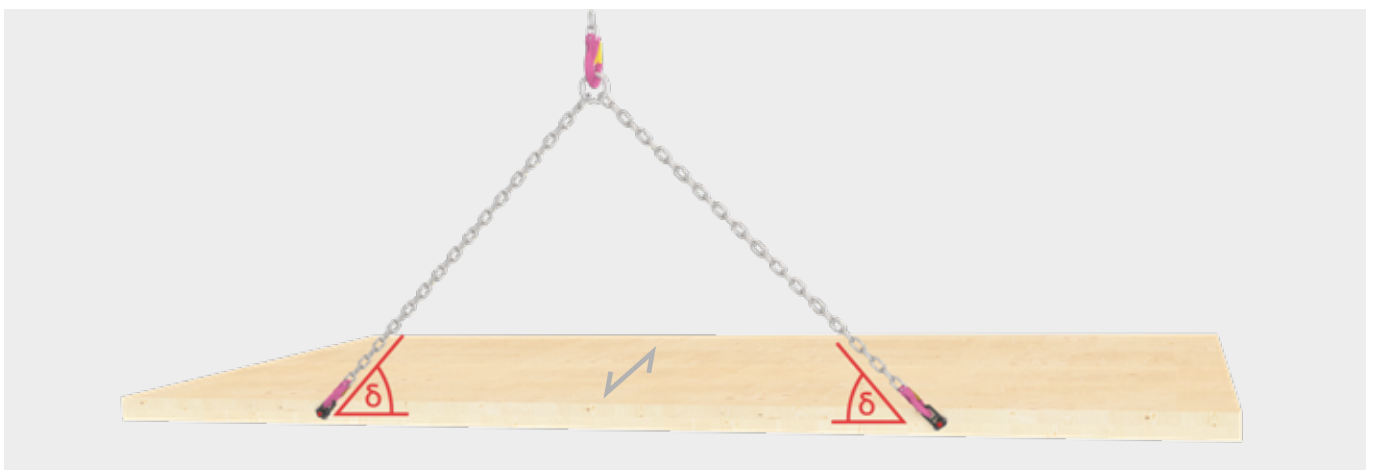
INFO:

- The values shown are an example calculation and must be individually checked for each case. If you have any questions, please contact our technical department (technik@eurotec.team).
- The design table values were calculated taking into account the expert's report "Load-bearing capacity of connections with Eurotec transport anchors – 2020" by H. J. Blaß, DIN standard EN 1995-1-1 and ETA-11/0024.
- For the raising and lifting phases of the rigging process, only the corresponding design tables have to be taken into account.
- The following were used as characteristic wood densities: $\rho_k = 350 \text{ kg/m}^3$ (C24) for the CLT panels and $\rho_k = 385 \text{ kg/m}^3$ (GL24h) for the laminated timber elements. For components with higher wood densities, the specified values can be estimated conservatively.
- The load capacities take into account a pair of KonstruX 8 x 245 mm screws, which are installed perpendicular to the direction of the grain, and six KonstruX 6 x 140 mm screws, which are installed at a 30° angle to the direction of the grain.
- A dynamic coefficient of $\phi = 2.0$ and a partial safety factor of $\gamma_g = 1.35$ were used. For other ϕ values, the table values must be multiplied by $2.0/\phi$.
- A modification factor $k_{mod} = 1.0$ and a partial safety coefficient for wood of $\gamma_M = 1.3$ were used.
- The minimum thickness of the CLT and laminated timber beams to be used with the connector is 100 mm.
- The minimum distance between the connectors' edges parallel to the component plane is 200 mm.
- The connector's cylindrical part must be fully inserted into the wooden component, and the screws must be attached so that they are flush with the connector plate's surface.
- The use of a rubber hammer to assist assembly is permitted.
- The transverse tensile reinforcement required for lifting depends on each individual case and must be determined by the manufacturer of the component to be lifted or by an authorised specialist.



Note

The tables depict the load case "Raising a horizontal wall or a horizontal beam and then lifting it" (lifting from the horizontal to hanging in the vertical). The connectors must be screwed into the components' central plane, so that they sit flush and at right angles to the surfaces of the narrow sides and lateral or end-grain surfaces.



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			30°	570
			45°	965
			60°	1575
			75°	2550
			B	with n legs
			90°	n x 1875

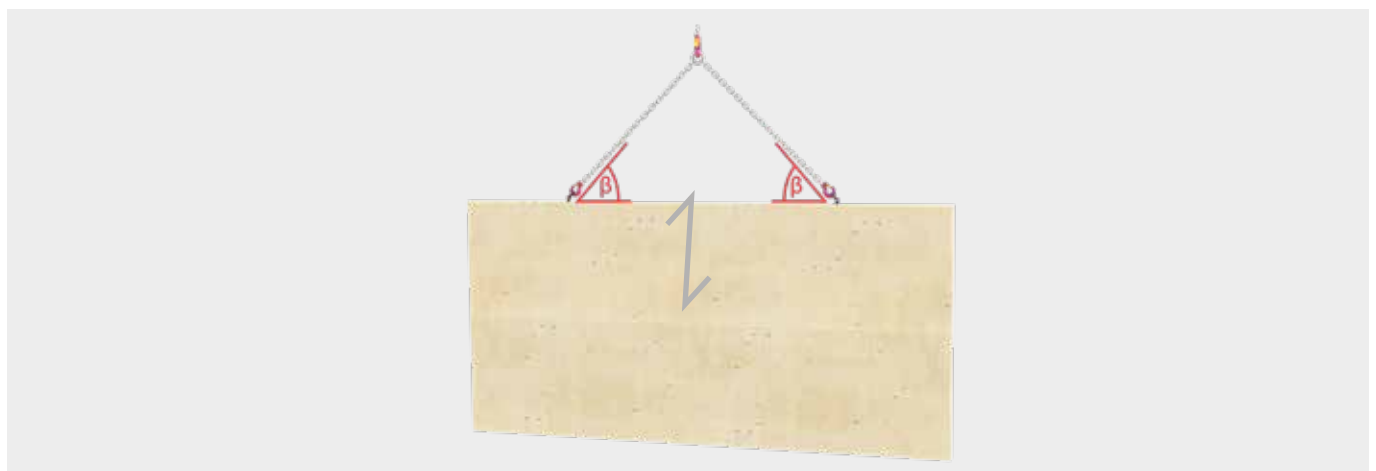
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Note

The tables show the load case "Lifting a vertical wall or beam" (lifting from the horizontal to hanging in the vertical). The table values only apply to lifting or assembly conditions.



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TRILIFT LIFTING ANCHOR

Support or beam made of laminated timber – raising

Support or beam made of laminated timber – raising				
Fastening point	Screw image and installation angle		Stop angle	Total load bearing capacity [kg]
	90°	30°	β	with 2 legs
Narrow-edged front side			30°	420
			45°	500
			60°	535
			75°	535
			β	with n legs
End-grain surface	2 x KonstruX 8 x 245 mm	6 x KonstruX 6.5 x 140 mm	90°	n x 280
			Stop angle	Total load bearing capacity [kg]
			β	with 2 legs
			30°	220
			45°	310
	60°	380		
	75°	420		
	β	with n legs		
	90°	n x 220		

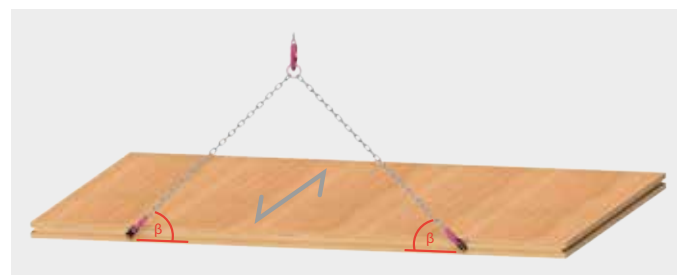
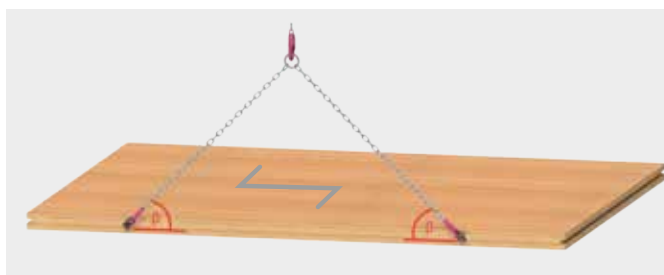
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	90°	30°	β	with 2 legs
Narrow-edged front side			30°	610
			45°	1000
			60°	1000
			75°	1000
			B	with n legs
			90°	n x 1392
End-grain surface	2 x KonstruX 8 x 245 mm	6 x KonstruX 6.5 x 140 mm	Stop angle	Total load bearing capacity [kg]
			β	with 2 legs
			30°	250
			45°	430
			60°	700
			75°	1320
			B	with n legs
			90°	n x 1130

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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).