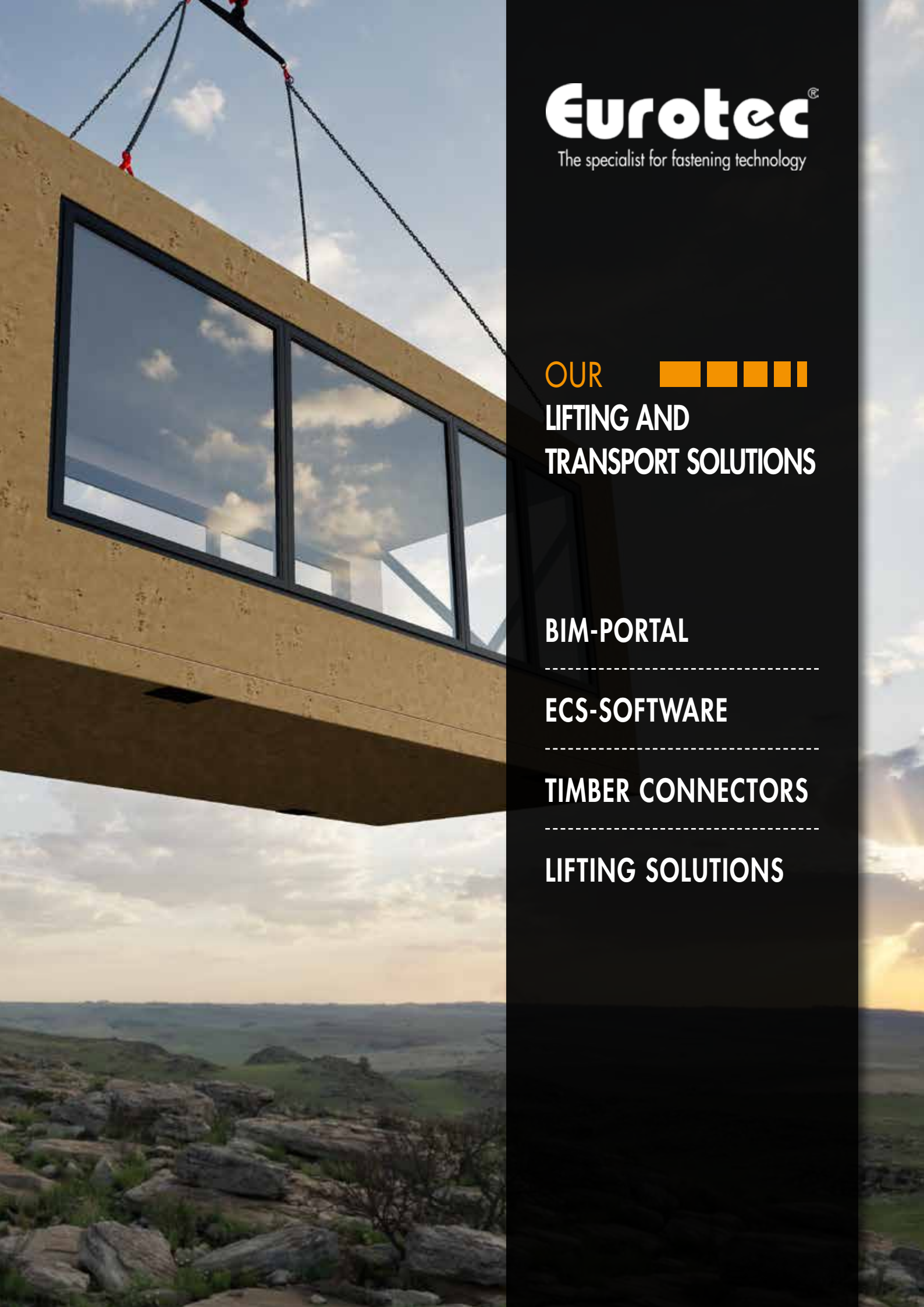

Eurotec®

The specialist for fastening technology

OUR LIFTING AND TRANSPORT SOLUTIONS

BIM-PORTAL

ECS-SOFTWARE

TIMBER CONNECTORS

LIFTING SOLUTIONS

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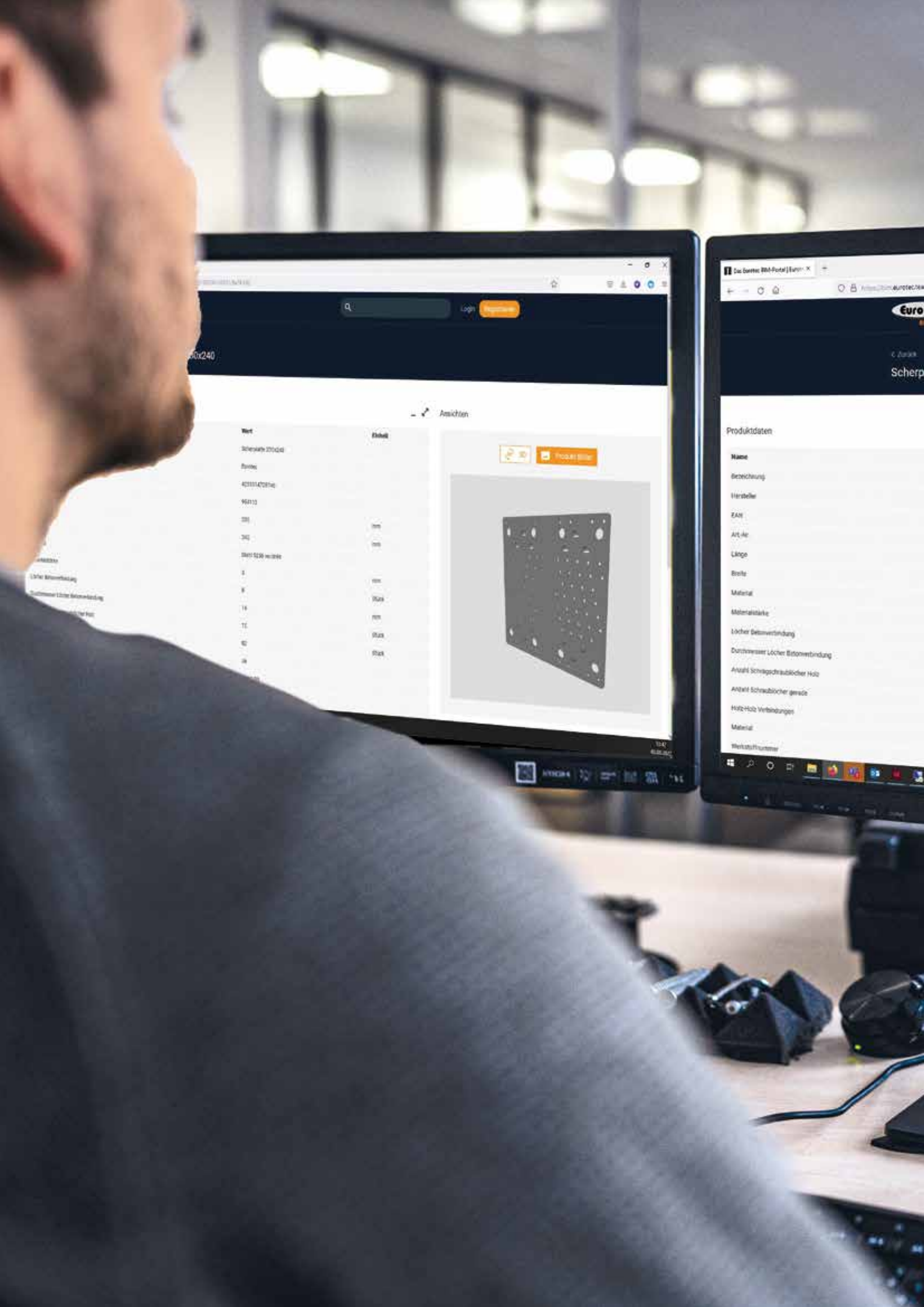
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Anzahl Schrägschraublöcher Holz
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Holz-Holz Verbindungen
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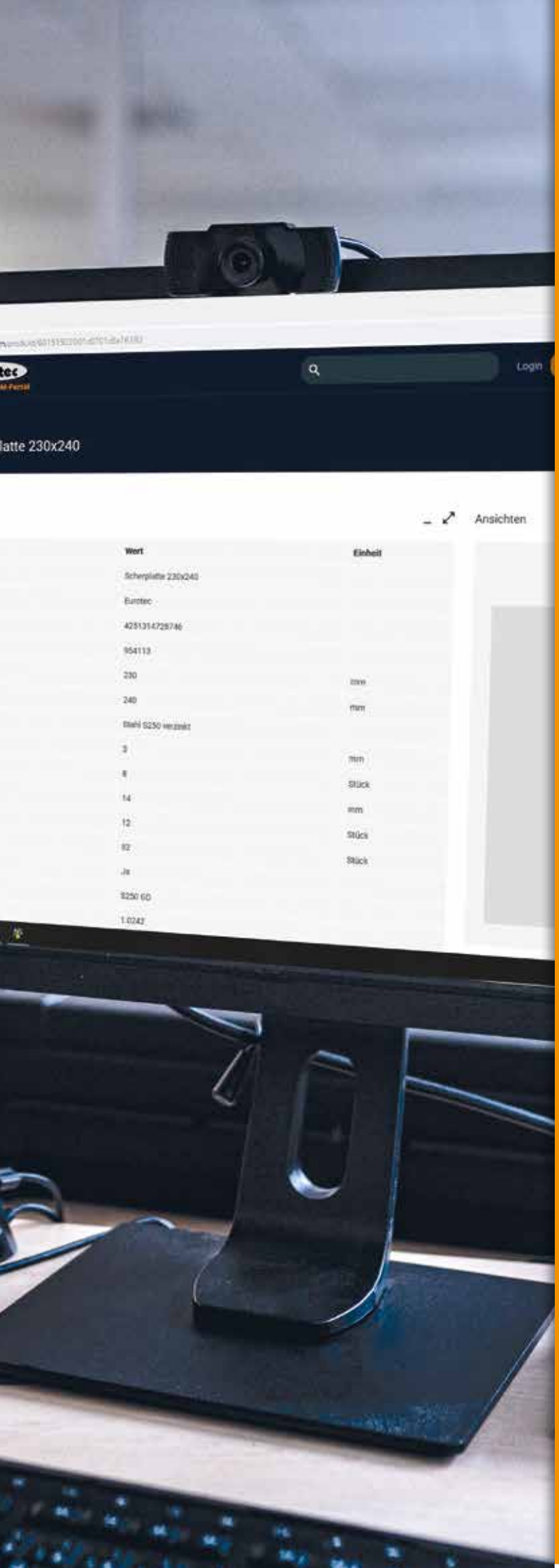

OUR EUROTEC
BIM-PORTAL
ALL THE DATA AT A GLANCE!

FOR YOUR CONSTRUCTION PLANNING!

Building Information Modeling has become an integral part of day-to-day planning. On our user-friendly platform, you will find product information for your construction project in the form of **BIM-enabled data.** The versatile file formats include 3D/CAD objects, DWG and PDF files as well as notes on our **ETA certifications.**

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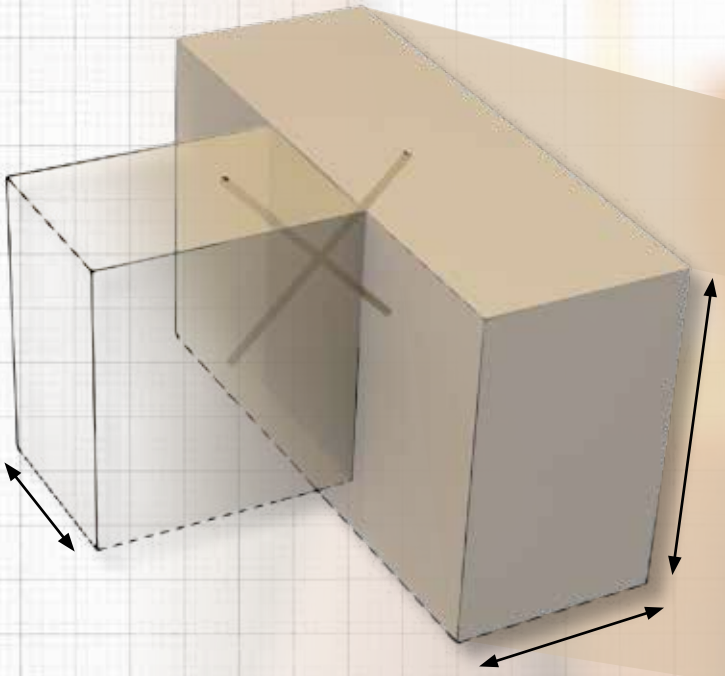
LEARN MORE ABOUT OUR ECS SOFTWARE

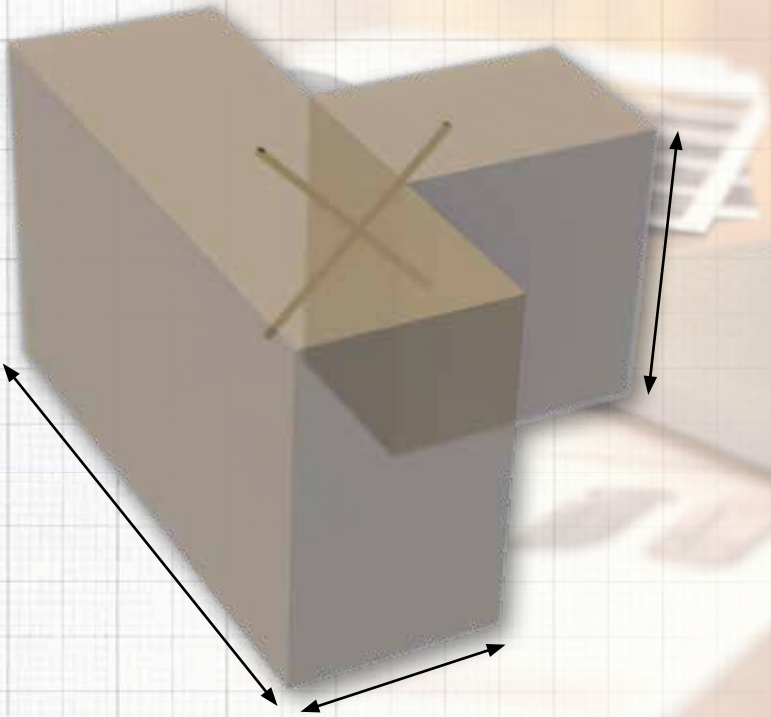
The ECS software is a free, user-friendly software for the pre-dimensioning of Eurotec wood construction screws. The modules include main and secondary beam connections, transverse tension and transverse pressure reinforcements, rafter-purlin connections, fastenings for roofing and façade insulation systems and many other applications.

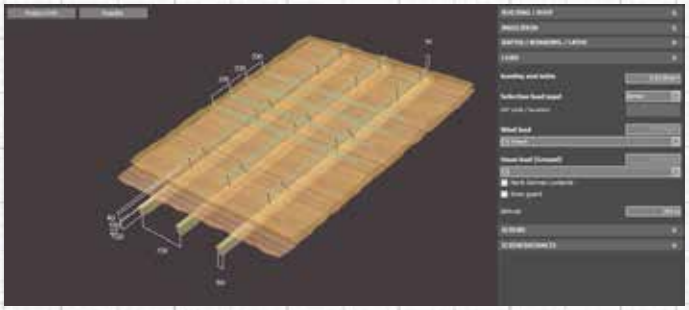
→ The program gives you the option to fully customise your individual connection application by modifying parameters such as the geometry, material type (e.g. beech laminated veneer timber and solid timber in different strength classes), load sizes (variable and permanent loads), the load class and more to suit your needs.

→ What's more, it makes it possible to optimise the fastening solution by adjusting the screw diameter and screw length as well as checking the strength utilisation factor, which is shown in the lower right corner of the screen.

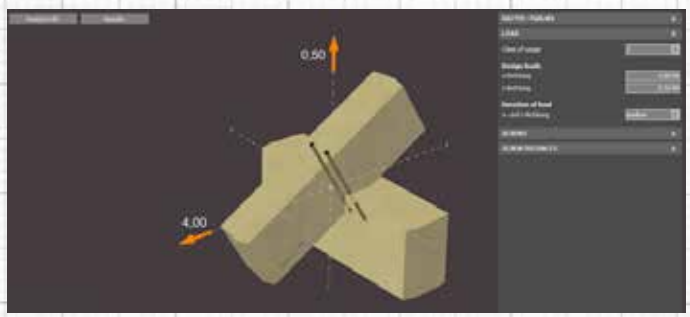
→ Once you have selected the connection solution, a calculation report in accordance with ETA-11/0024 and EN 1995 (Eurocode 5) is available to you, including the corresponding drawings in PDF format.



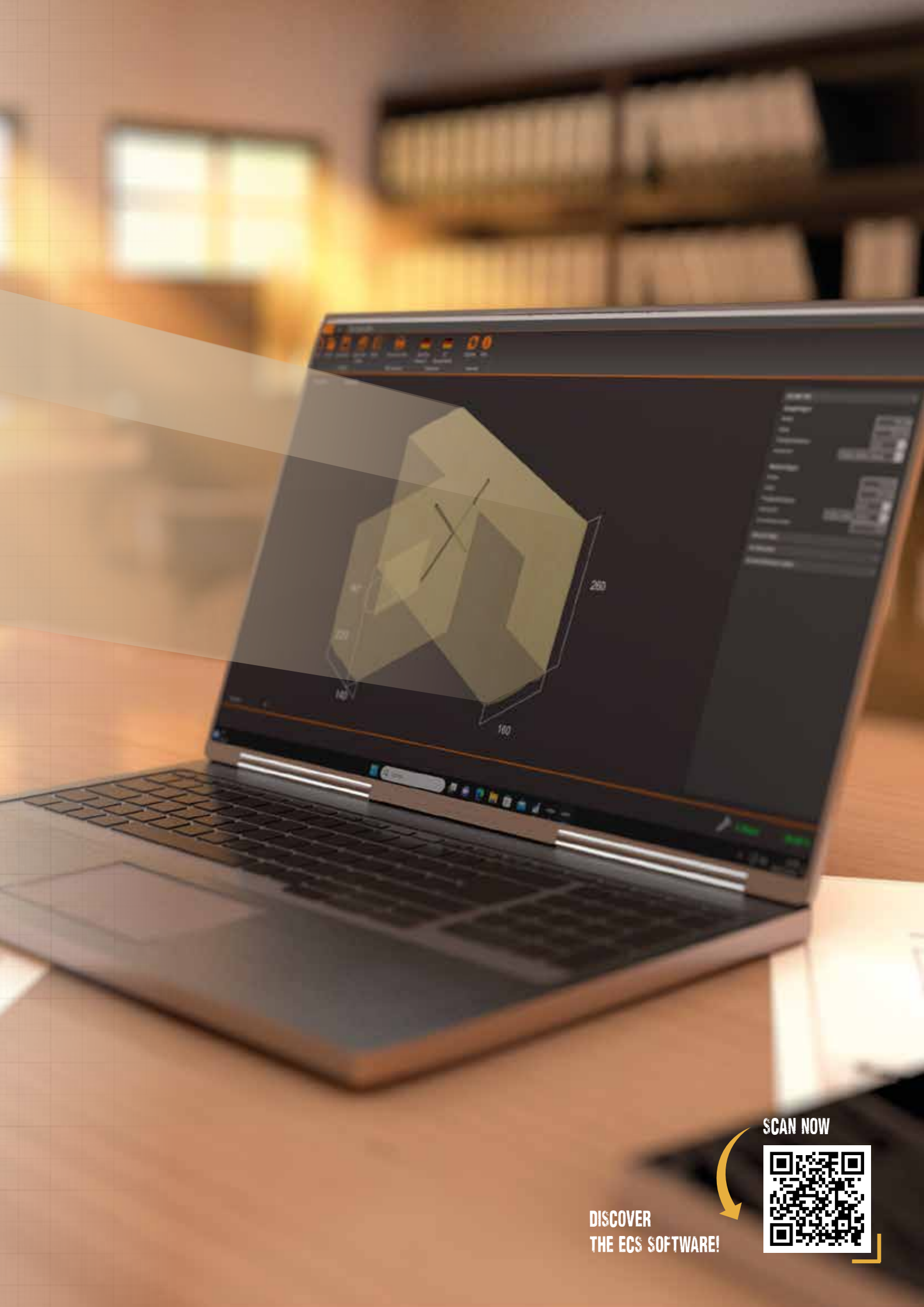




Module for the fastening of insulation materials on rafters using Topduo



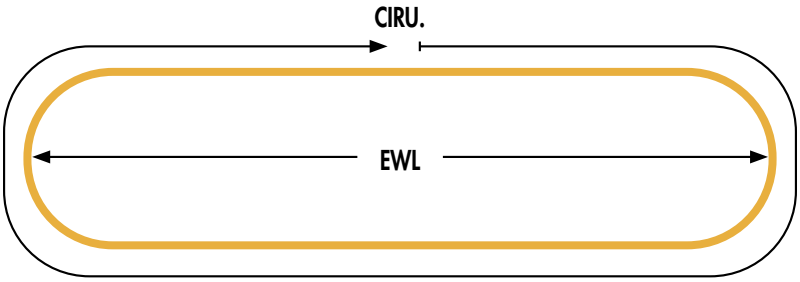
Module for rafter-purlin connections using Paneltwistec and KonstruX


SCAN NOW
DISCOVER
THE ECS SOFTWARE!

SINGLE-USE LIFTING STRAP

The single-use lifting strap is ideal for transporting goods from the production facility to the consumer. In accordance with DIN 60005, single-use lifting straps can only be used once and must be destroyed and disposed of at the end of the transport chain.They can be recognised above all by the orange label with a notice regarding single use. The minimum breaking strength of single-use lifting straps is equal to five times the load-bearing capacity. They are lightweight and highly flexible and therefore provide optimumhandling characteristics. They are used both on the shop floor and on construction sites. Following successful transport of the goods,the lifting straps can be detached easily.

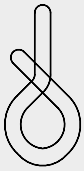
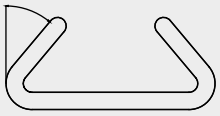
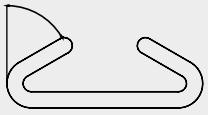
The single-use lifting straps are available in the following effective working lengths: 40 cm, 50 cm, 60 cm, 80 cm, 100 cm and120 cm..



ADVANTAGES/SPECIFICATIONS

- Cost-effective transport aids
- Easy handling and disposal
- Flexible, lightweight lifting tackle
- Suitable for various attachment methods
- Easy detachment of the product
- Manufactured in accordance with DIN 60005

Single-use lifting strap (DIN 60005)			
Art. no.	Description	Description 2	WLL
800361	Single-use lifting strap EWL 0,4 m	Extent 0,8 m	800 kg
800362	Single-use lifting strap EWL 0,5 m	Extent 1,0 m	800 kg
800363	Single-use lifting strap EWL 0,6 m	Extent 1,2 m	800 kg
800381	Single-use lifting strap EWL 0,8 m	Extent 1,6 m	800 kg
800382	Single-use lifting strap EWL 1,0 m	Extent 2,0 m	800 kg
800383	Single-use lifting strap EWL 1,2 m	Extent 2,4 m	800 kg
900360	Single-use sling 30 mm x 800 kg x 0,5 m/1 m	DIN60005, blue	800 kg
900361	Single-use sling 30 mm x 800 kg x 0,75 m/1,5 m	DIN60005, blue	800 kg
900362	Single-use sling 30 mm x 800 kg x 1 m/2 m	DIN60005, blue	800 kg
900363	Single-use sling 30 mm x 800 kg x 1,5 m/3 m	DIN60005, blue	800 kg
900364	Single-use sling 30 mm x 800 kg x 2 m/4 m	DIN60005, blue	800 kg
900365	Single-use sling 30 mm x 800 kg x 3 m/6 m	DIN60005, blue	800 kg
900366	Single-use sling 30 mm x 1400 kg x 0,5 m/1 m	DIN60005, white	1400 kg
900367	Single-use sling 30 mm x 1400 kg x 0,75 m/1,5 m	DIN60005, white	1400 kg
900368	Single-use sling 30 mm x 1400 kg x 1 m/2 m	DIN60005, white	1400 kg
900369	Single-use sling 30 mm x 1400 kg x 1,5 m/3 m	DIN60005, white	1400 kg
900370	Single-use sling 30 mm x 1400 kg x 2 m/4 m	DIN60005, white	1400 kg
900371	Single-use sling 50 mm x 2000 kg x 1 m/2 m	DIN60005, green	2000 kg
900372	Single-use sling 50 mm x 2000 kg x 1,5 m/3 m	DIN60005, green	2000 kg
900373	Single-use sling 50 mm x 2000 kg x 2 m/4 m	DIN60005, green	2000 kg

Load bearing capacity				
Simply direct	Simply laced	Simply turned	7°–45°	45°–60°
800 kg	640 kg	1600 kg	1120 kg	800 kg
				

APPLICATION IMAGE

TRANSPORT ANCHOR SYSTEM

Transport anchors and transport anchor screws – The safe load-handling system

The quality-Steel load-handling device is used to safely and easily lift wooden components of all kinds. The transport anchors of the up to 1.3 t load group may only ever be used with the Eurotec transport anchor screws Ø 11 x 125 mm and Ø 11 x 160 mm. The Eurotec transport anchor screws may only be used once. They are to be screwed into solid wood (soft wood), laminated veneer timber, laminated timber, cross-laminated timber, dowellam and squared timber without pre-drilling. Use in hardwood is not permitted. The possible or permissible installation positions can be found in our operating instructions. We will be happy to supply them to you.

Art. no.	Dimensions [mm][a)]	Max. load capacity [kg][b)]	PU*
110361	190 x 70	1300	2

a) Length x Width
b) The maximum load capacities apply to the anchor only. For the maximum values, including screw, please refer to the following table
*Screws must be ordered separately

TO NOTE

Transport anchor screws may only be used once.

· Screw in the screws without pre-drilling.

· Read the operating instructions in detail before use.

· Users must be trained before first operating the device.

· Transport anchors must be inspected for damage before every use and discarded, if necessary.

· The load of the component to be lifted must not exceed the permissible value.

· Min. of 2 fastening points per component to be lifted.

Permissible lifting load[a)] per fastening point[b)]				
	γ[c)]	α[d)]	11 x 125 mm	11 x 160 mm
Axial pull	60°	60°	533 kg	603 kg
	60°	30°	409 kg	462 kg
Diagonal pull	60°	90°	462 kg	522 kg
	60°	0°	139 kg	157 kg

a) Design in accordance with ETA-11/0024 with the bulk density ρ_k= 350 kg/m³; k_{mod}= 0.9; γ_M= 1.3; γ_G= 1.35; g= 9.81 m/s² and the dynamic factor φ_2= 1.16.
All stated mechanical values must be considered as dependent on the assumptions made and represent design examples. All values are calculated minimum values and subject to typesetting and printing errors.
b) At least 2 legs must be provided for each component to be lifted. Each leg leads to exactly one fastening point. If more than 2 legs are attached, only 2 anchor points may be assumed to be load-bearing, unless an even load distribution, for example by means of a balancing rocker, to other legs is ensured or if an uneven load distribution does not exceed the permissible load of the individual legs.
c) γ - Tilt angle of the leg (chain, rope, lifting belt, etc.) at least 60° according to BGR 500
d) α - Angle between the direction of the grain and the screw axis
Attention: These are planning aids. The projects must always be designed by authorised persons.

Transport anchor screw

Quality Steel, with AG tip,specially coated

specially coated

Art. no.	Dimensions [mm]	Drive	PU
110359	11 x 125	SW17	20
110360	11 x 160	SW17	20
110371	11,0 x 200	SW17	20
110372	11,0 x 250	SW17	20
110373	11,0 x 300	SW17	20

APPLICATION IMAGE

Transport anchor system for safe transports.

PRESS-IN NUT

The M12/M16 press-in nut is a high-quality fastening solution for applications that require a stable internal thread. It is made of Steel or stainless Steel and offers a high load-bearing capacity. The nut can easily be inserted into pre-drilled holes in the timber and, with its galvanised surface, ensures additional corrosion protection, whereby its service life is extended.

Art. no.	Load class [t]	Diameter [mm]	Thread [dxh]	Weight [kg]	PU
111420	0,5	60 x 3	M12	0,068	50
111421	1,2	60 x 3	M16	0,074	50

Notes
For special requirements or other materials, there are individual solutions available. Contact us if you have special requirements or for tailor-made offers.

ADVANTAGES / SPECIFICATIONS

- **Easy to install:** Quick and easy installation by hammering into the component.
- **Corrosion protection:** The galvanised design protects against rust tand increases the nut's service life.
- **Compatibility:** M12/M16
- **Field of application:** Suitable for use in timber.
- **Use:** Single use

ROPE LOOP

The rope loop for drive-in nuts is a durable fastening element made of high-quality, corrosion-resistant Steel. It is characterised by a high tensile strength and ensures safe load handling even under high loads. Installation is quick and uncomplicated, as it is compatible with many common drive-in nuts. Particularly in the construction industry, the rope loop is ideal for applications where long-term stability and reliable fastenings are required.

Art. no.	Load class [t]	Height [mm]	Thread [dxh]	Weight [kg]	PU
111423	0,5	500	M12 x 22	0,164	1
111424	1,2	500	M16 x 27	0,313	1

ADVANTAGES / SPECIFICATIONS

- **Easy to install:** Quick and easy to install thanks to the metric thread.
- **Compatibility:** Fits M12 & M16
- The maximum load capacity is clearly stated, so that users can be sure to choose the loop for their specific applications.
- **Use:** Multiple use is possible (after testing).

INSTALLATIONNOTES

HOW THE SYSTEM WORKS:

1. Drill a pilot hole through the prefabricated part – for M12/16mm, M16/19mm

2. Insert the press-in nut into the pre-drilled hole and drive it in

3. Screw in the WBS screws

4. The rope loop is guided through the pre-drilled hole.

5. Screw the threaded eyelet into the drive-in nut until the thread has been completely screwed **in**

6. Lift the load

7. Release the anchor

Note
If you are unfamiliar with the this product, in particular with regard to its intended use, please be sure to contact our application technology department (**technik@eurotec.team**).

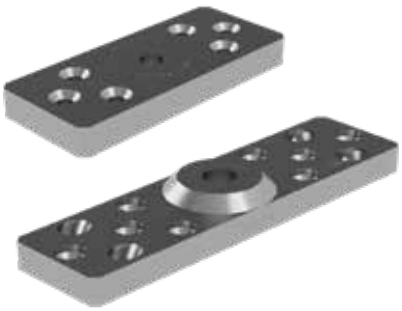
More information can be found in the enclosed product datasheet.

ALSO TAKE A LOOK AT OUR OTHER CATALOGUES, LIKE THE CLT CATALOGUE!

FURHTER INFORMATION CAN BE FOUND ON OUR WEBSITE!
www.eurotec.team

POWERBLOCK TRANSPORT ANCHOR

The Powerblock is a powerful lifting device that was specifically designed for handling and transporting CLT panels and glued laminated timber elements. With a load capacity of up to 6.3 tonnes per attachment point, the Powerblock delivers maximum safety and efficiency for a wide range of lifting operations. Thanks to its versatile installation configurations, the Powerblock can be flexibly adjusted to your requirements. It can, for example, be attached to the end faces of CLT walls, the wide surface of CLT panels or the top side of beams. This makes the Powerblock a reliable tool for the safe, cost-effective and fast assembly of wooden structures.



Art. no.	Name	Dimensions [mm][a)]	Material	Thread [dxh]	PU
110380	Powerblock M	190 x 80 x 20	Steel - S235JR	M14	1
110381	Powerblock L	300 x 80 x 30	Steel - S355JR	M24	1

a) Length x Width x Height

SUITABLE SLING SWIVELS:

Art. no.	Name	Max. load capacity [kg]	PU
110387	Sling swivel M14	1120/2240	1
110389	Sling swivel M24	3150/6300	1

APPLICATION IMAGE

Powerblock transport anchor in use.

SUITABLE SCREWS:

KONSTRUX:

Art. no.	Dimensions [mm]	Drive	PU
904771	10,0 x 155	TX50 •	25
904773	10,0 x 220	TX50 •	25
904776	10,0 x 300	TX50 •	25

ANGLE-BRACKET SCREW:

Art. no.	Dimensions [mm]	Drive	PU
945344	5,0 x 60	TX20 •	250

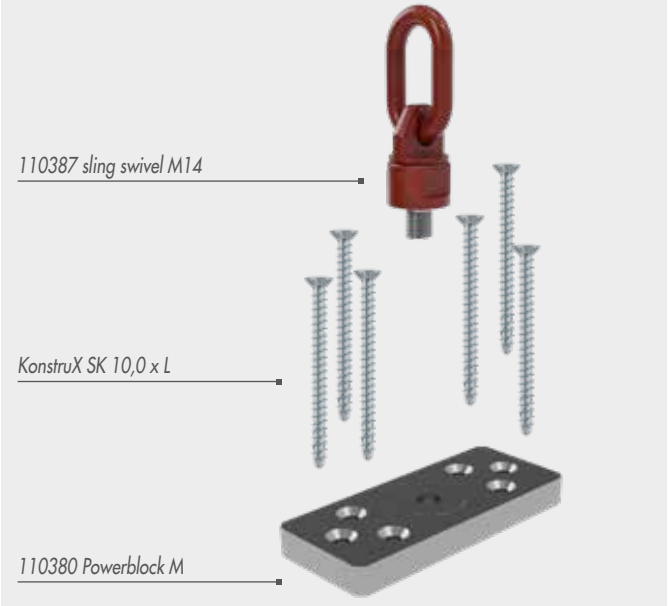
APPLICATIONS:

- Wall or floor panels made of CLT, can also be used on end faces
- Solid wood and glued laminated timber beams
- Prefabricated walls with a timber frame construction
- Prefabricated modular structures

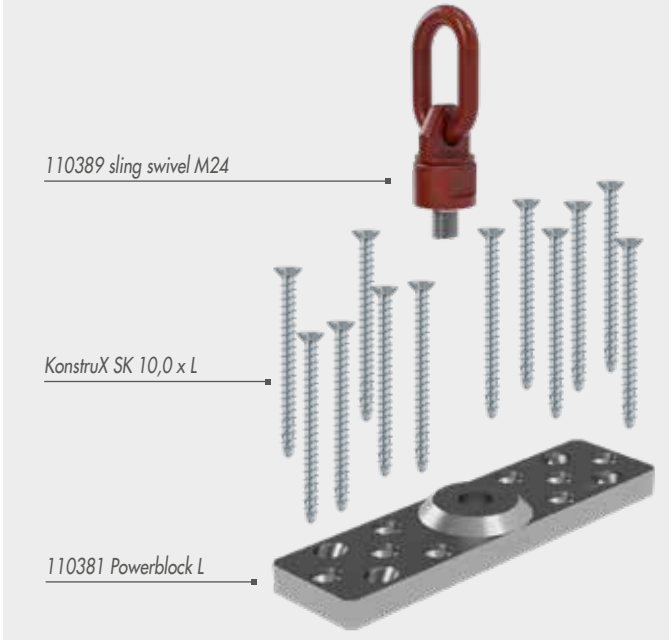
IMPORTANT SPECIFICATIONS:

- **Load capacity:** up to 6.3 t per fastening point
- **Reusable:** visually inspect before each use and conduct an annual inspection according to DGUV 109-017
- Several different possible installation options depending on the application
- The sling swivels can rotate freely, allowing them to automatically adjust to the direction of pull.

SET VARIANT M
Consists of:

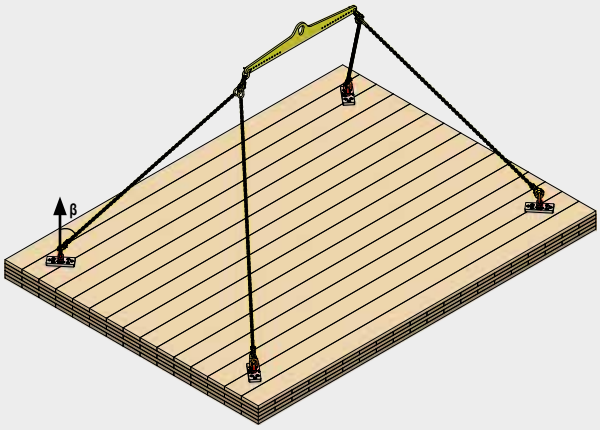


SET VARIANT L
Consists of:



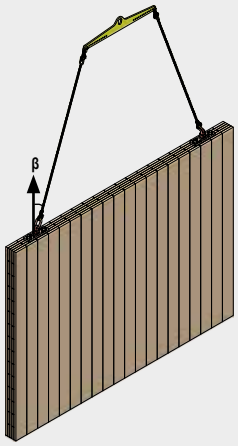
TECHNICAL DATA:

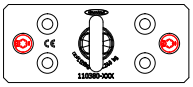
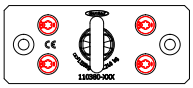
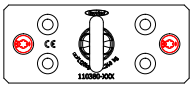
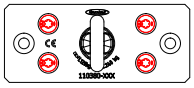
POWERBLOCK M MAXIMUM LOAD CAPACITY (CLT FLOOR):



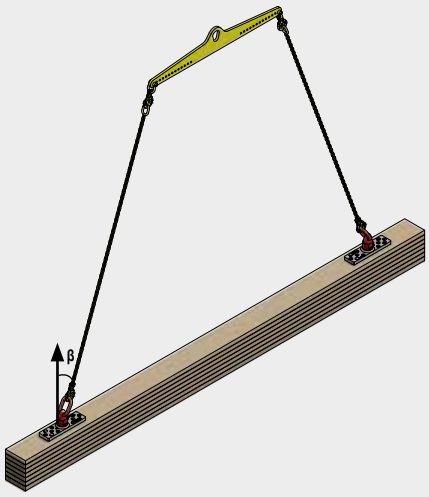
KonstruX		CLT thickness [mm]	Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]				β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
10	155	140-190	2	1,2	1403	773	500	301
				1,9	886	488	315	190
			4	1,2	2240	1120	994	602
904771 KonstruX SK 10 x 155 mm				1,9	1710	965	628	380
			6	1,2	2240	1120	1120	903
				1,9	2240	1120	942	570
10	220	210-280	2	1,2	2079	846	518	305
904773 KonstruX SK 10 x 220 mm				1,9	1313	534	327	193
			4	1,2	2240	1120	1033	610
				1,9	2240	1062	652	385
			6	1,2	2240	1120	1120	915
				1,9	2240	1120	979	578

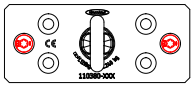
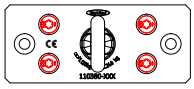
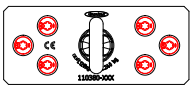
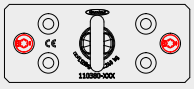
CLT WALL:



KonstruX		Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
10	155	2 	1,2	943	515	332	200
			1,9	595	325	210	126
904771 KonstruX SK 10 x 155 mm		4 	1,2	1819	1018	661	399
			1,9	1149	643	417	252
10	220	2 	1,2	1343	558	343	202
			1,9	848	353	216	128
904773 KonstruX SK 10 x 220 mm		4 	1,2	2240	1110	684	404
			1,9	1636	707	432	255
10	270	2 	1,2	1642	575	347	203
			1037	363	219	128	193
904775 KonstruX SK 10 x 270 mm		4 	1,2	2240	1120	692	406
			1,9	2000	723	437	256

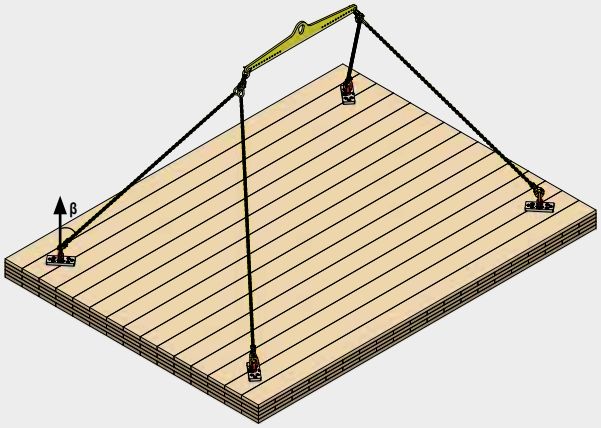
BEAM:

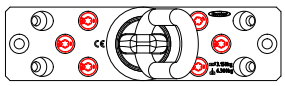
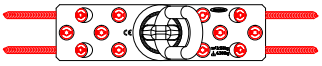
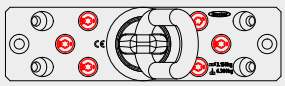


KonstruX		Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
10	155	2 	1,2	1514	817	526	316
			1,9	^956	516	332	200
904771 KonstruX SK 10 x 155 mm		4 	1,2	2240	1120	1047	632
			1,9	1845	1021	661	399
		6 	1,2	2240	1120	1570	948
			1,9	2240	1120	9920	599
10	220	2 	1,2	2240	891	544	320
904773 KonstruX SK 10 x 220 mm			1,9	1417	563	343	202
		4 	1,2	2240	1120	1085	640
			1,9	2240	1120	685	404
		6 	1,2	2240	1120	1120	960
			1,9	2240	1120	1028	606

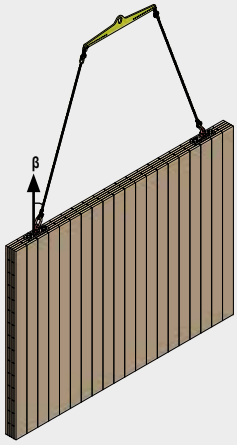
TECHNICAL DATA:

POWERBLOCK M MAXIMUM LOAD CAPACITY (CLT FLOOR):



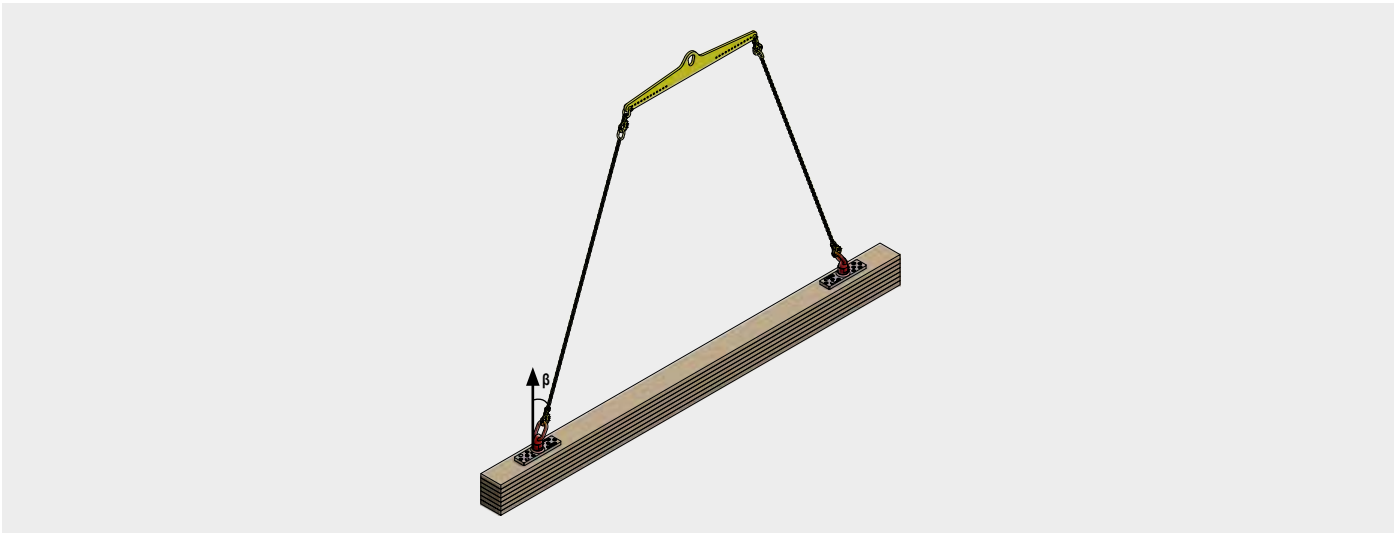
KonstruX		CLT thickness [mm]	Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]				β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
10	155	140-190	6 	1,2	4060	2293	1492	903
				1,9	2564	1448	942	570
904771 KonstruX SK 10 x 155 mm			12 	1,2	6300	3150	2983	1805
				1,9	5129	2896	1884	1140
10	220	210-280	6 	1,2	6015	2522	1550	915
				1,9	3799	1593	979	578
904773 KonstruX SK 10 x 220 mm			12 	1,2	6300	3150	3099	1830
				1,9	6300	3150	1957	1156

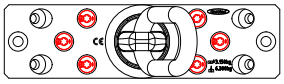
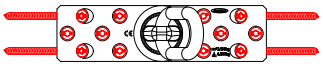
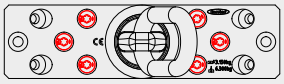
CLT WALL:



KonstruX		Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
10	155	4	1,2	1819	1018	661	399
			1,9	1149	643	417	252
904771 KonstruX SK 10 x 155 mm		8	1,2	3638	2036	1321	799
			1,9	2297	1286	834	504
10	220	4	1,2	2591	1110	684	404
			1,9	1636	701	432	255
904773 KonstruX SK 10 x 220 mm		8	1,2	5181	2219	1368	809
			1,9	3272	1402	864	511
10	270	4	1,2	3167	1145	692	406
			1,9	2000	723	437	256
904775 KonstruX SK 10 x 270 mm		8	1,2	6300	2290	1384	812
			1,9	4000	1446	874	513

BEAM:

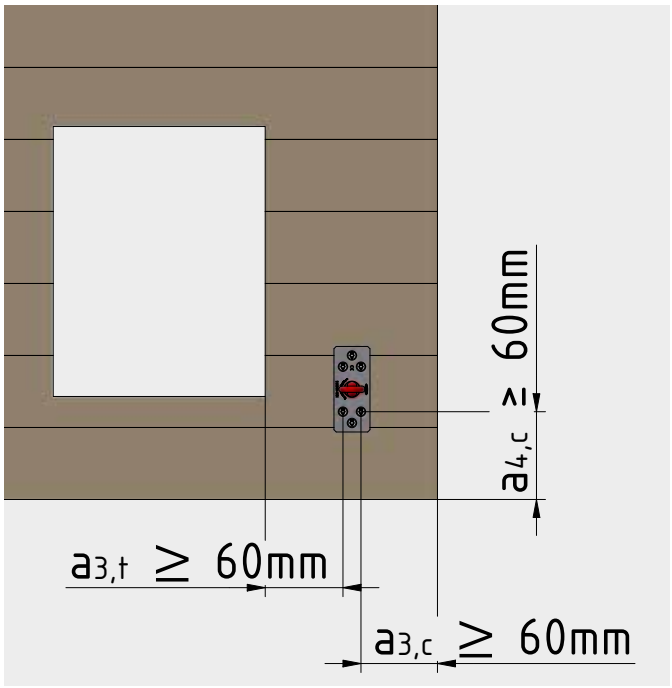


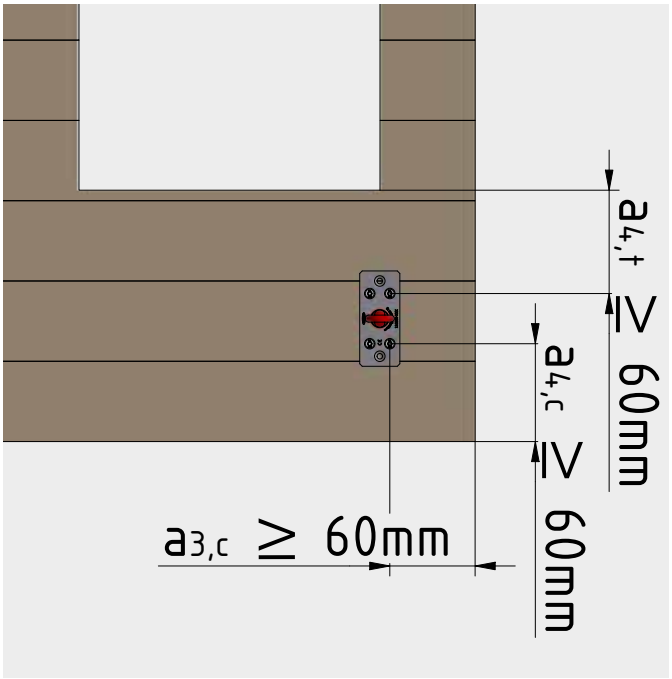
KonstruX		Screw layout	Dynamic factor	Load capacity [kg]			
D [mm]	L [mm]			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
10	155	6 	1,2	4382	2426	1570	948
			1,9	2768	1532	992	599
904771 KonstruX SK 10 x 155 mm		12 	1,2	6300	3150	3140	1896
			1,9	5535	3064	1983	1197
10	220	6 	1,2	6300	2657	1628	960
			1,9	4100	1678	1028	606
904773 KonstruX SK 10 x 220 mm		12 	1,2	6300	3150	3150	1920
			1,9	6300	3150	2056	1213

MINIMUM DISTANCES FOR THE INSTALLATION:

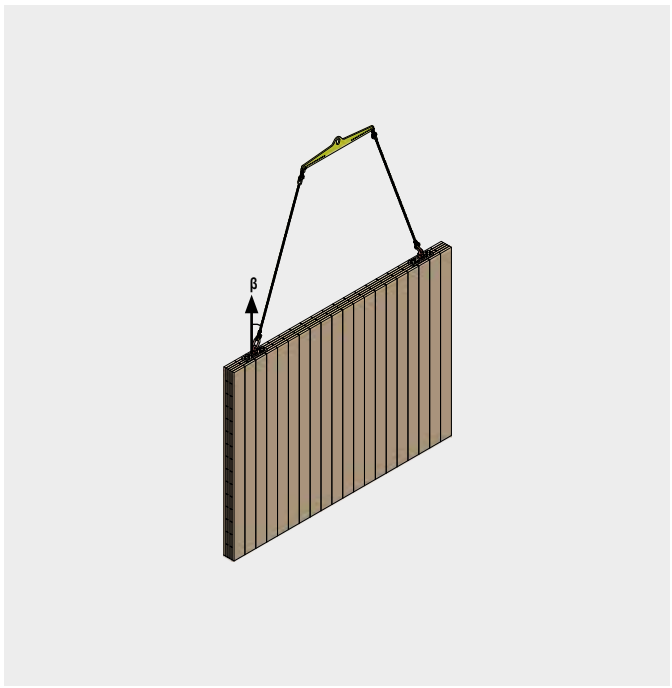
POWERBLOCK M

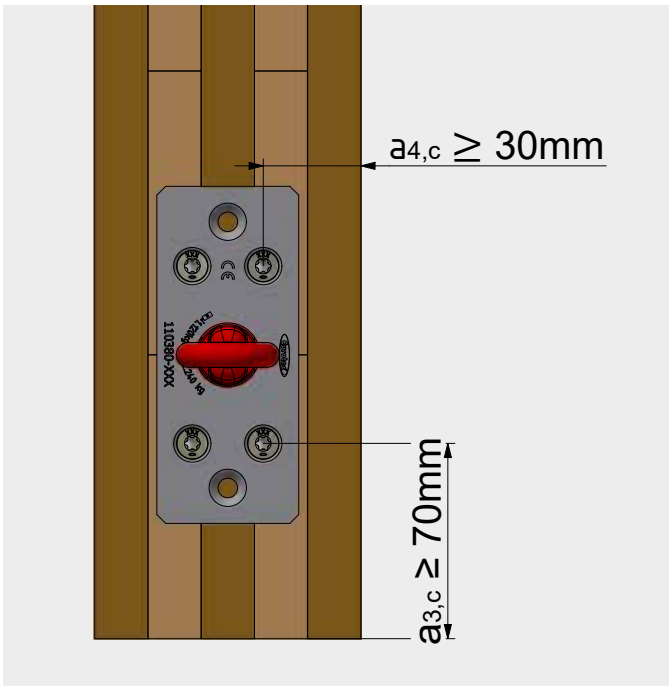
CLT FLOOR:



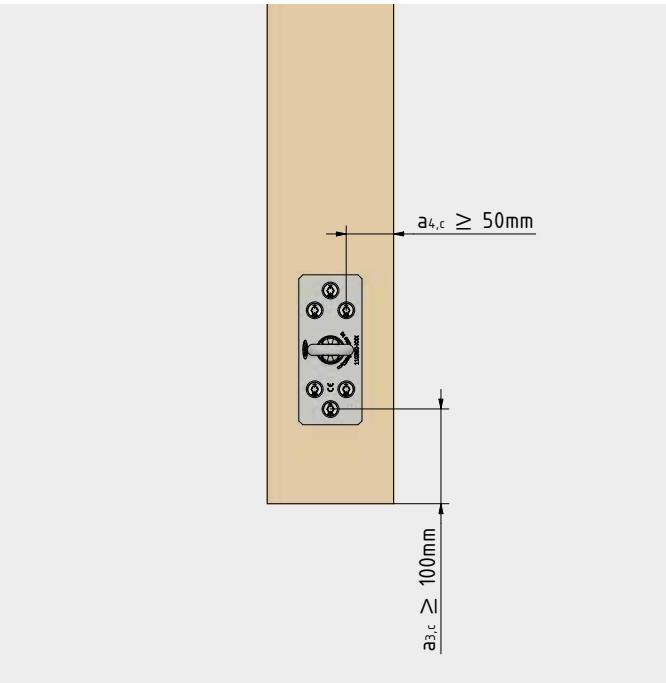


CLT WALL:



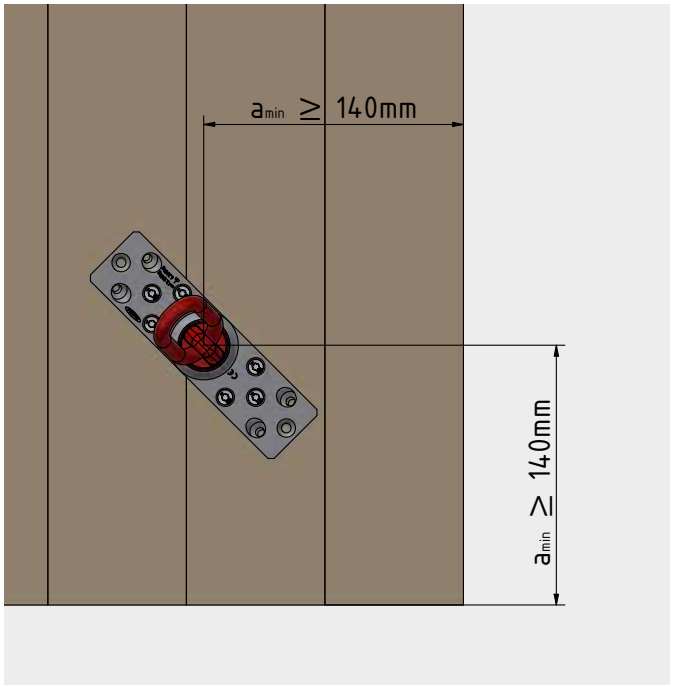


BEAM:

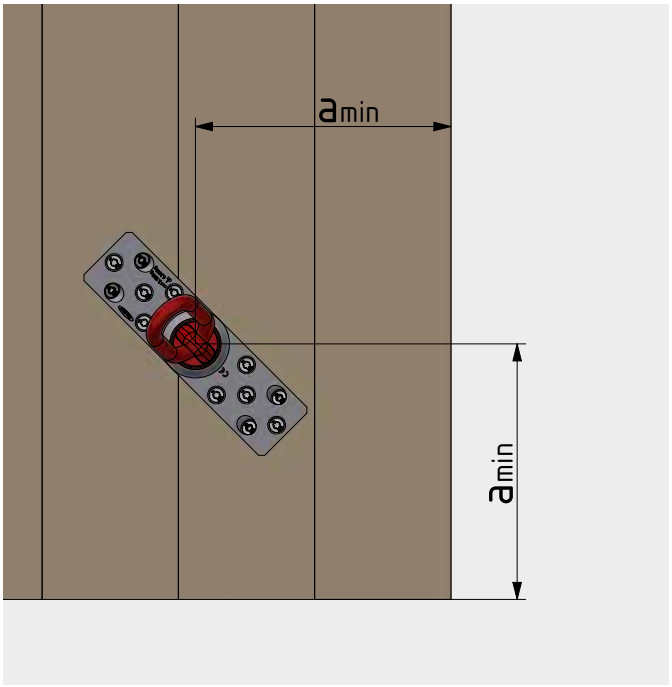


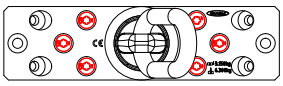
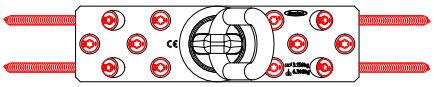
POWERBLOCK L
CLT WALL:

PARTIAL UTILISATION



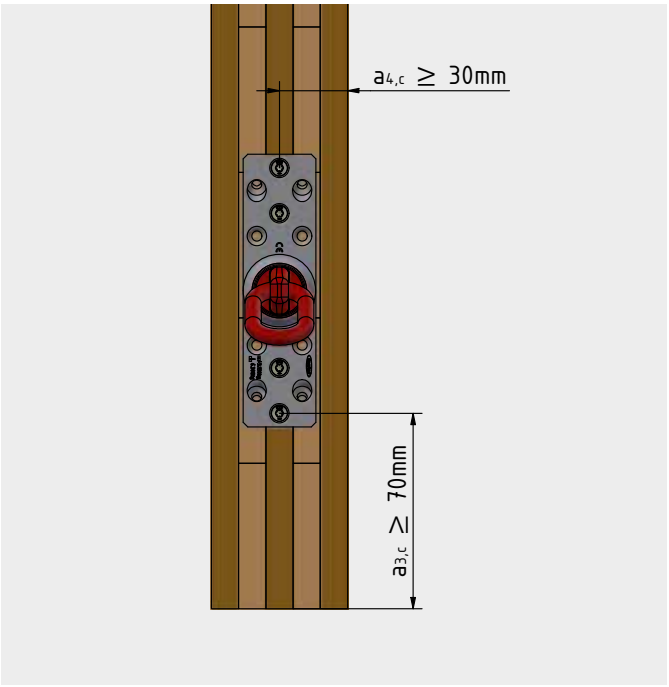
FULL UTILISATION



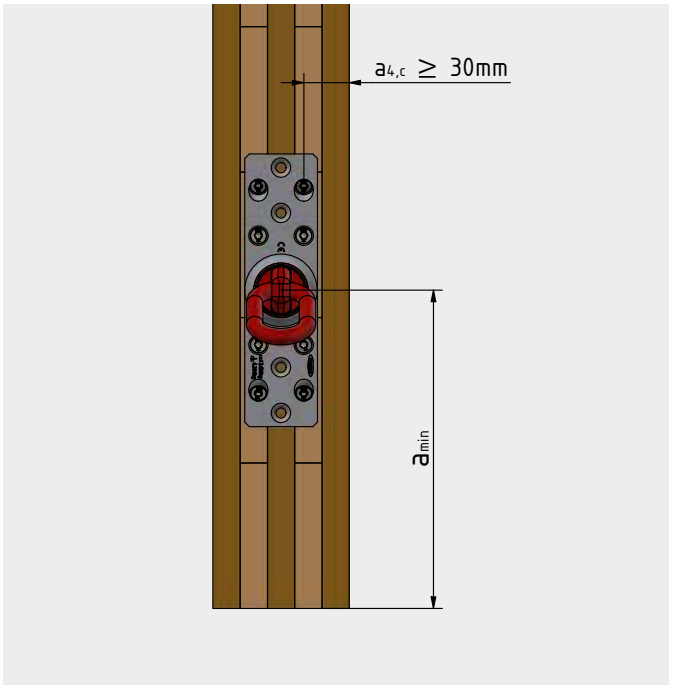
KonstruX screw d x L [mm x mm]	a min [mm]	
		
904771 KonstruX SK 10 x 155 mm	140	220
904773 KonstruX SK 10 x 220 mm		240
904775 KonstruX SK 10 x 270 mm		260

CLT WALL:

4 SCREWS

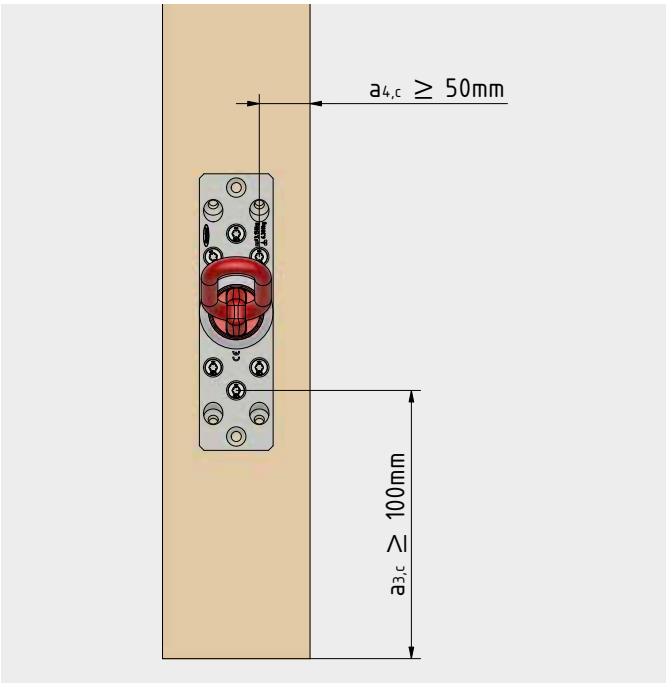


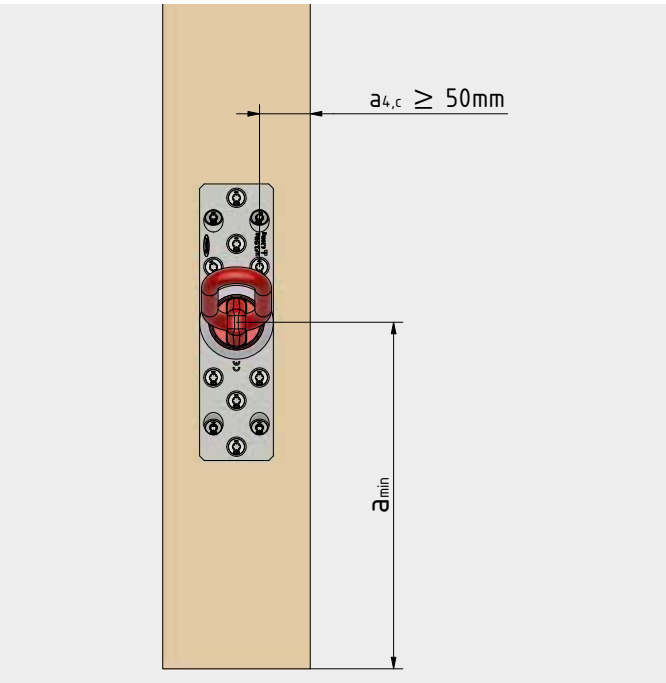
8 SCREWS



KonstruX screw d x L [mm x mm]	a min [mm]
904771 KonstruX SK 10 x 155 mm	220
904773 KonstruX SK 10 x 220 mm	240
904775 KonstruX SK 10 x 270 mm	260

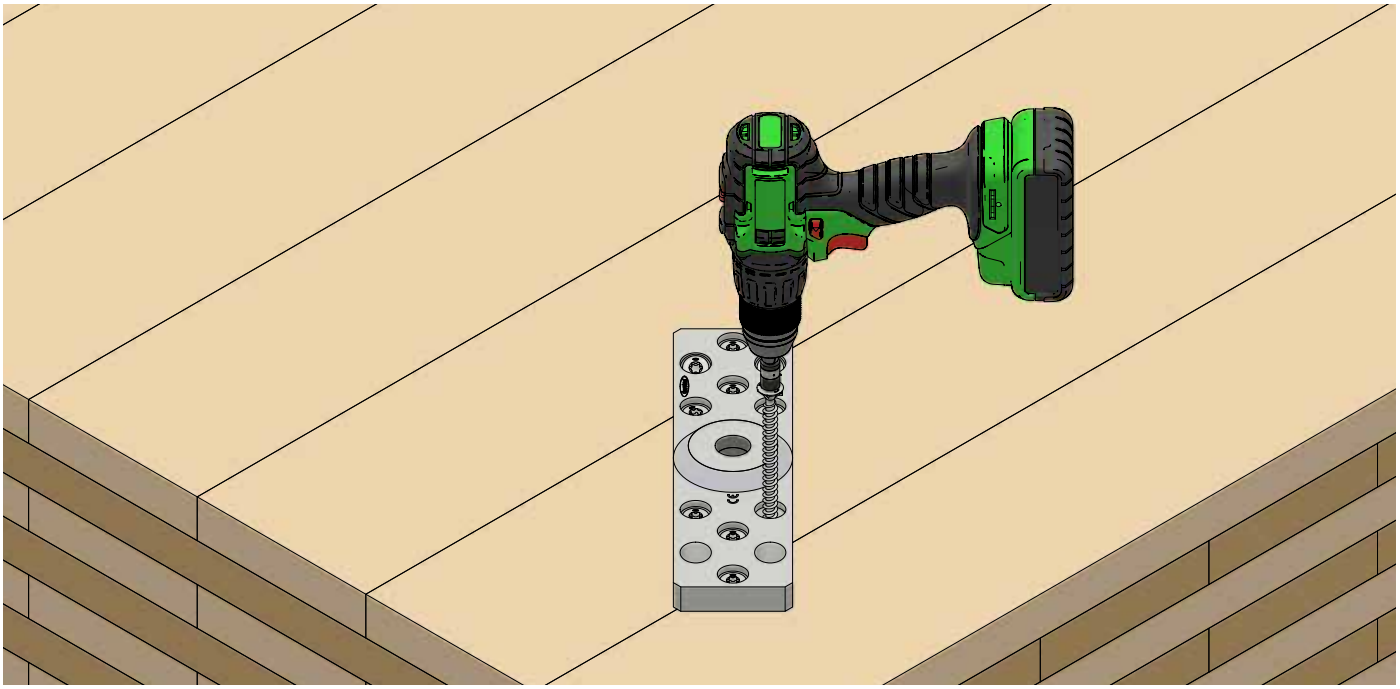
BEAM:



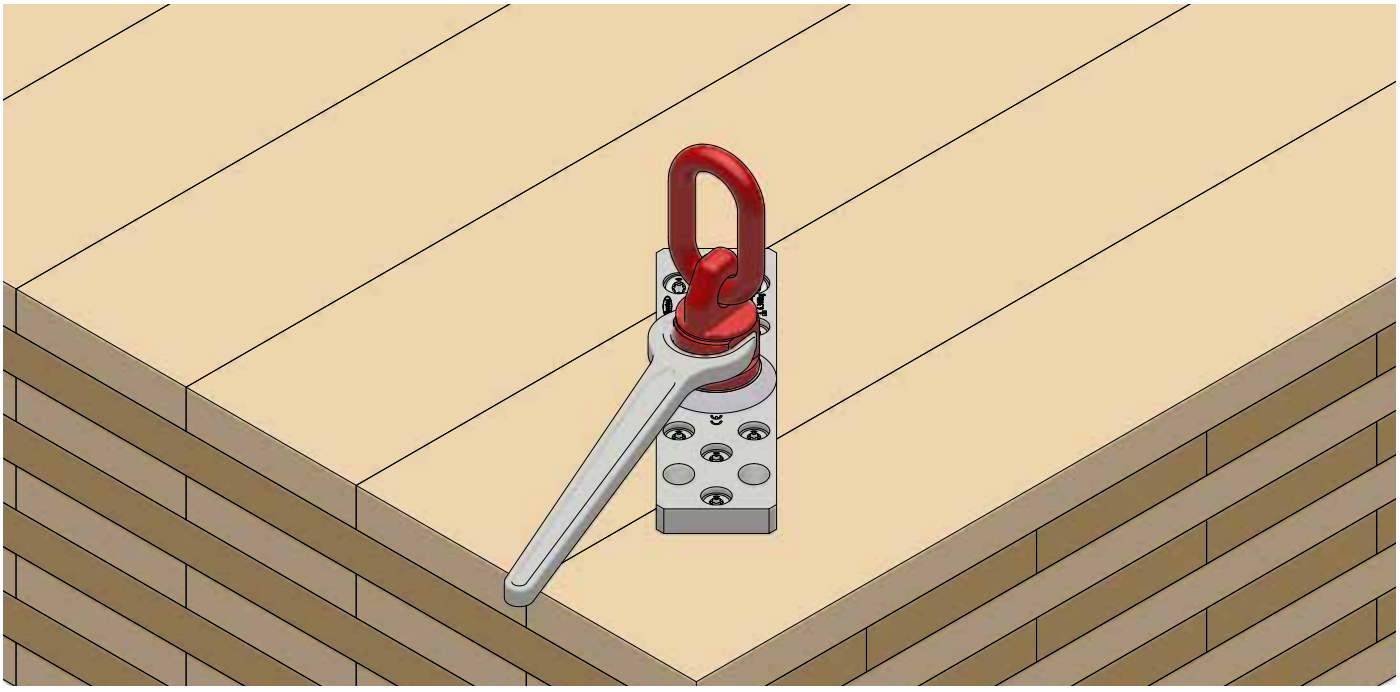


KonstruX screw d x L [mm x mm]	a min [mm]
904771 KonstruX SK 10 x 155 mm	220
904773 KonstruX SK 10 x 220 mm	240
904775 KonstruX SK 10 x 270 mm	260

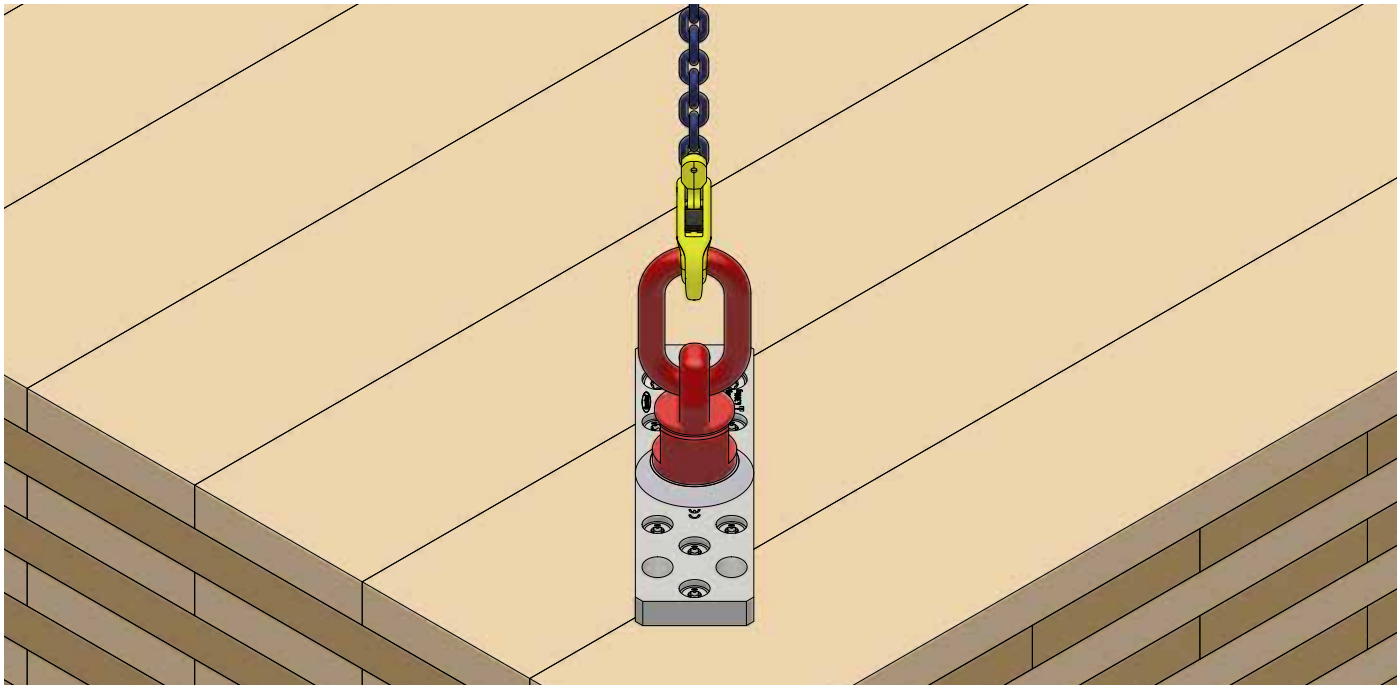
ASSEMBLY INSTRUCTIONS:



Step 1: *Screw in the appropriate KonstruX screws depending on the configuration (see technical data).*



Step 2: *Screw in and tighten the sling swivels.*



Step 3: *Hook the power block at the predetermined angle (see technical data) and lift.*

POWERRING TRANSPORT ANCHOR

The Powerring is a powerful lifting device that was specifically designed for handling and transporting CLT panels and glued laminated timber elements. With a load capacity of up to 6.3 tonnes per attachment point, the Powerring offers maximum safety and efficiency for a wide range of lifting operations. Thanks to its versatile installation configurations, the Powerring can be flexibly adjusted to your requirements. It can, for example, be attached to the wide surface of CLT panels or the top side of beams. This makes the Powerring a reliable tool for the safe, cost-effective and fast assembly of wooden structures.

Art. no.	Name	External dimensions [mm]	Material	Thread [dxh]	PU
110382	Powerring S	Ø 100 x 18	Stahl - S235JR	M12	1
110383	Powerring M	Ø 110 x 20	Stahl - S235JR	M14	1
110384	Powerring XL	Ø 130 x 30	Stahl - S235JR	M24	1

SUITABLE SLING SWIVELS:

Art. no.	Name	Max. load capacity [kg]	PU
110386	Sling swivels M12	500/1000	1
110387	Sling swivels M14	1120/2240	1
110389	Sling swivels M24	3150/6300	1

APPLICATION IMAGE

Powerring transport anchor in use.

SUITABLE SCREWS:

ANGLE-BRACKET SCREW:

Art. no.	Dimensions [mm]	Drive	PU
945344	5,0 x 60	TX20 ●	250

KONSTRUX:

Art. no.	Dimensions [mm]	Drive	PU
904857	6,5 x 80	TX30 ●	100
904858	6,5 x 100	TX30 ●	100
904860	6,5 x 140	TX30 ●	100
904792	8,0 x 155	TX40 ●	50
904794	8,0 x 220	TX40 ●	50
904797	8,0 x 295	TX40 ●	50
904771	10,0 x 155	TX50 ●	25
904773	10,0 x 220	TX50 ●	25
904776	10,0 x 300	TX50 ●	25

APPLICATIONS:

- Wall or floor panels made of CLT,+can also be used on end faces
- Solid wood and glued laminated timber beams
- Prefabricated walls with a timber frame construction
- Prefabricated modular structures

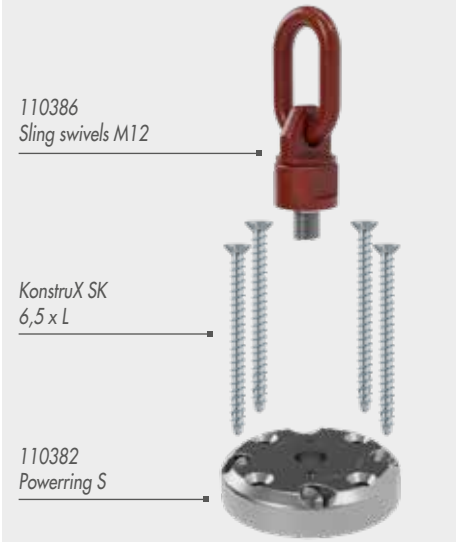
IMPORTANT SPECIFICATIONS:

- **Load capacity:** up to 6.3 t per fastening point
- **Reusable**: visually inspect before each use and conduct an annual inspection according to DGUV 109-017
- Several different possible installation options depending on the application
- The sling swivels can rotate freely, allowing them to automatically adjust to the direction of pull.

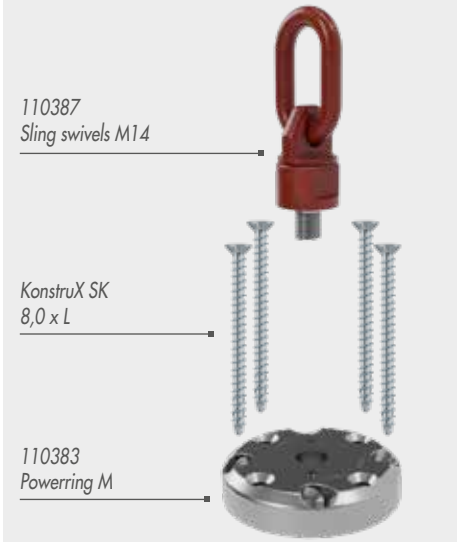
SEVERAL DIFFERENT INSTALLATION OPTIONS DEPENDING ON THE APPLICATION:

1. 8 combined screws (full capacity): maximum load capacity when using vertical and oblique screws
2. 4 screws inclined by 90° (partial utilisation): optimised for lifting lighter or slimmer components with vertical ropes (ß = 0°)
3. 4 screws inclined by 45° (partial utilisation): optimised for lifting lighter components with inclined ropes (ß > 0°)

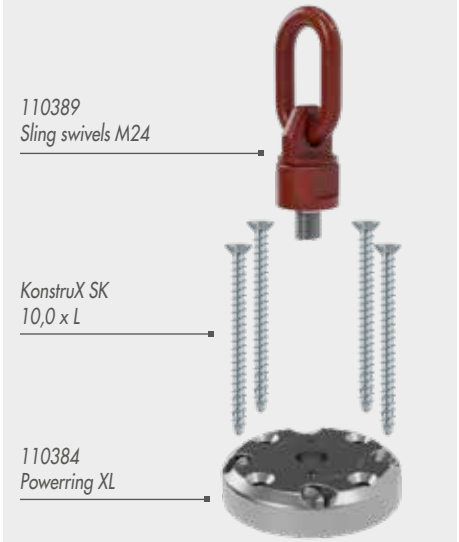
SET VARIANT S
Consists of:



SET VARIANT M
Consists of:

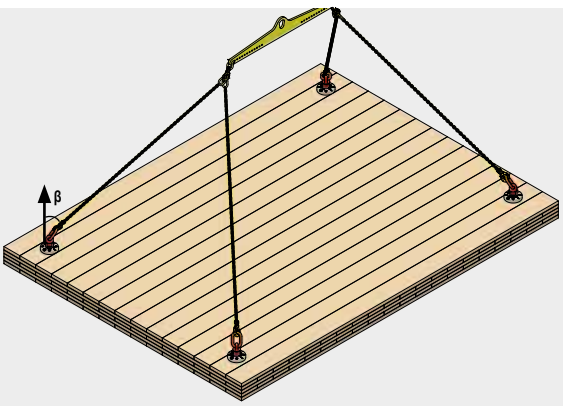


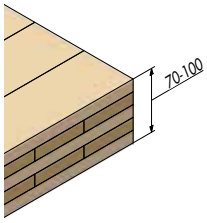
SET VARIANT XL
Consists of:



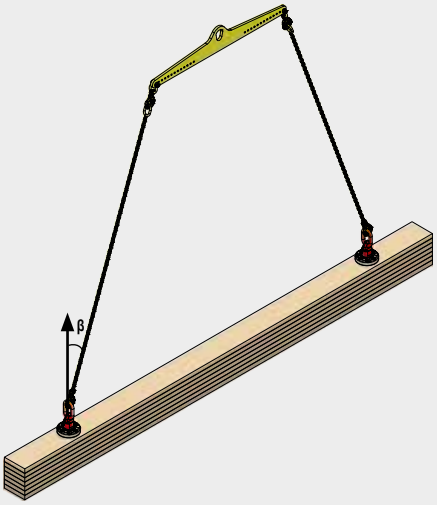
TECHNICAL DATA:

MAXIMUM LOAD CAPACITY POWERRING S (CLT-FLOOR):



CLT thickness	Powerring configuration S 904858 Konstrux SK 6,5 x 100 mm	Dynamic factor	Load capacity [kg]			
			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
	45° 	1,2	1000	500	500	411
		1,9	643	500	391	260
	90° 	1,2	1000	500	500	317
		1,9	909	500	331	200
	90°+45° 	1,2	1000	500	500	500
		1,9	1000	500	500	467

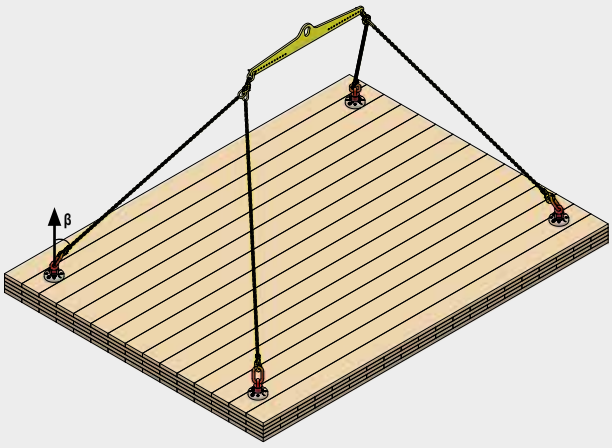
BEAM:

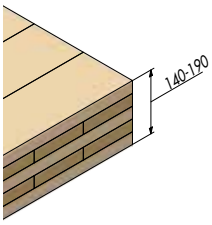


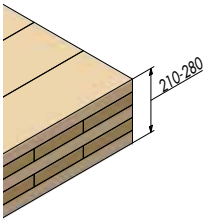
Powerring S	Powerring configuration S	Dynamic factor	Load capacity [kg]			
			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
	904857 KonstruX SK 6,5 x 80	1,2	1000	500	500	328
		1,9	742	487	333	207
90° 	904858 KonstruX SK 6,5 x 100	1,2	1000	500	500	333
		1,9	982	500	349	210
	904860 KonstruX SK 6,5 x 140	1,2	1000	500	500	337
		1,9	1000	500	361	213

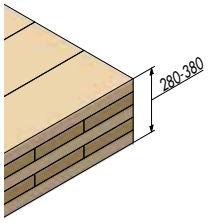
TECHNICAL DATA:

MAXIMUM LOAD CAPACITY POWERRING M (CLT-FLOOR):

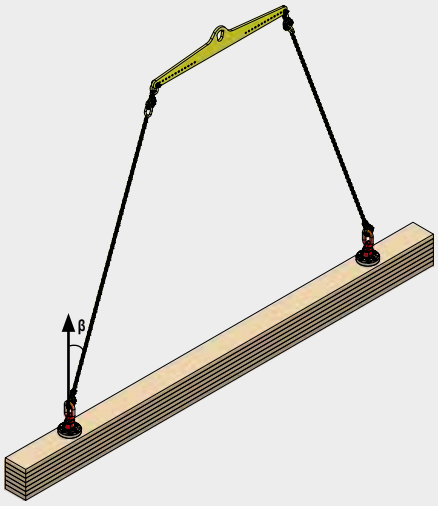


CLT thickness	Powerring configuration M 904792 Konstrux SK 8,0 x 155 mm	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	45° 	1,2	1664	1120	984	649
		1,9	1051	826	621	410
	90° 	1,2	2240	1120	741	443
		1,9	1486	740	468	280
	90°+45° 	1,2	2240	1120	1120	1110
		1,9	2240	1120	1120	701

CLT thickness	Powerring configuration M 904794 Konstrux SK 8,0 x 220 mm	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	45° 	1,2	2240	1120	1120	896
		1,9	1557	1120	871	566
	90° 	1,2	2240	1120	762	447
		1,9	2202	796	481	282
	90°+45° 	1,2	2240	1120	1120	1120
		1,9	2240	1120	1120	868

CLT thickness	Powerring configuration M 904797 Konstrux SK 8,0 x 295 mm	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	45° 	1,2	2240	1120	1120	1085
		1,9	1946	1120	1062	685
	90° 	1,2	2240	1120	768	448
		1,9	2240	815	485	283
	90°+45° 	1,2	2240	1120	1120	1120
		1,9	2240	1120	1120	994

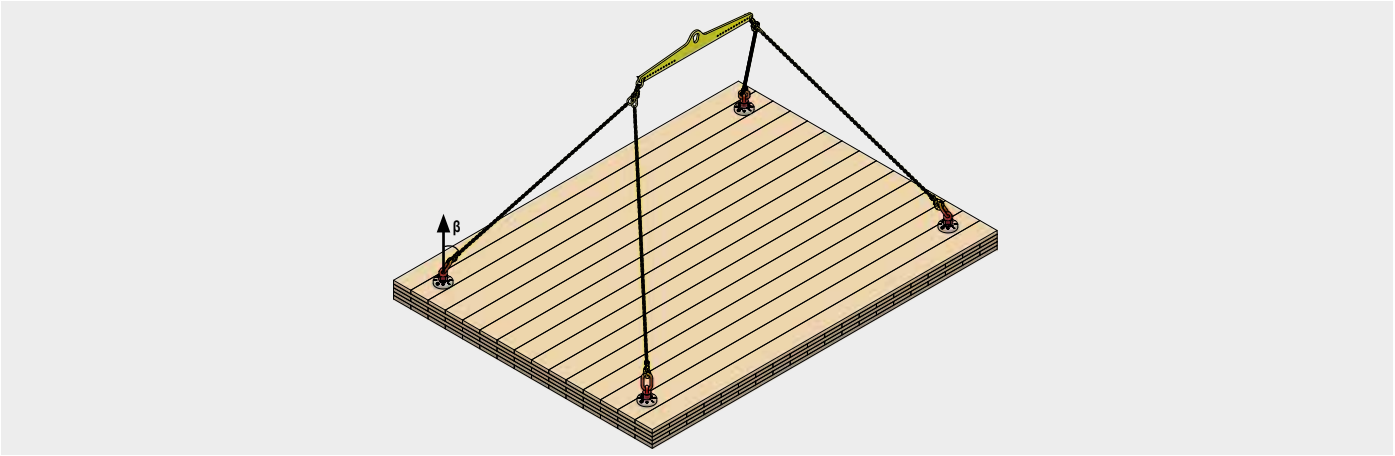
BEAM:

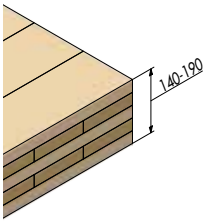


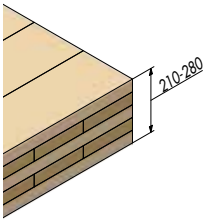
Powerring M	Powerring configuration M	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	904792 KonstruX SK 8 x 155	1,2	2240	1120	780	465
		1,9	1604	782	492	294
90° 	904794 KonstruX SK 8 x 220	1,2	2240	1120	800	469
		1,9	2240	839	506	296
	904797 KonstruX SK 8 x 295	1,2	2240	1120	805	470
		1,9	2240	852	509	297

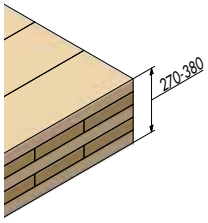
TECHNICAL DATA:

MAXIMUM LOAD CAPACITY POWERRING XL (CLT-FLOOR):

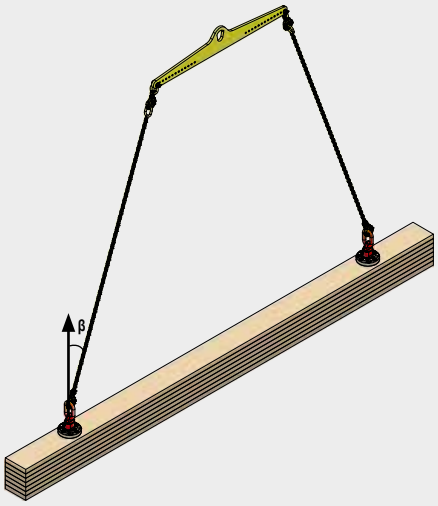


CLT thickness	Powerring configuration XL 904771 Konstrux SK 10,0 x 155 mm	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	45° 	1,2	1772	1427	1093	730
		1,9	1119	901	690	461
	90° 	1,2	2507	1489	983	599
		1,9	1583	941	621	379
	90°+45° 	1,2	4279	3018	2131	1347
		1,9	2703	1906	1346	851

CLT thickness	Powerring configuration XL 904773 Konstrux SK 10,0 x 220 mm	Dynamic factor	Load capacity [kg]			
			β = 0°	0° < β < 30°	30° < β < 45°	45° < β < 60°
	45° 	1,2	2693	2084	1553	1016
		1,9	1701	1316	981	642
	90° 	1,2	3809	1665	1029	609
		1,9	2405	1052	650	385
	90°+45° 	1,2	6300	3150	2701	1658
		1,9	4106	2547	1706	1047

CLT thickness	Powerring configuration XL 904776 Konstrux SK 10,0 x 300 mm	Dynamic factor	Load capacity [kg]			
			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
	45° 	1,2	3827	2883	2111	1365
		1,9	2417	1821	1333	862
	90° 	1,2	5412	1752	1049	613
		1,9	3418	1107	662	387
	90°+45° 	1,2	6300	3150	3150	2027
		1,9	5835	3150	2118	1280

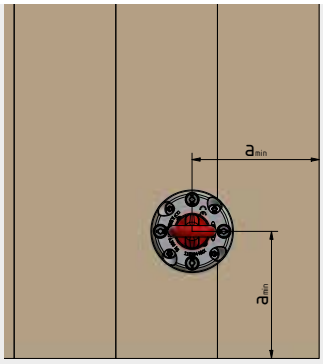
BEAM:

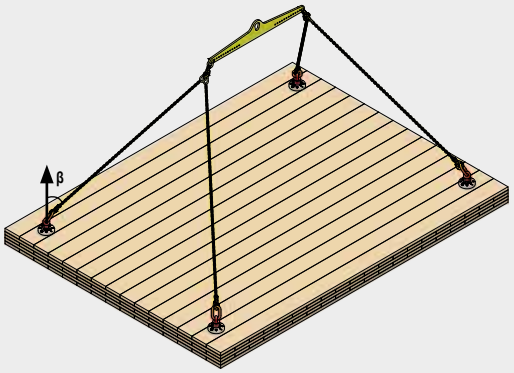


Powerring XL	Powerring configuration XL	Dynamic factor	Load capacity [kg]			
			ß = 0°	0° < ß < 30°	30° < ß < 45°	45° < ß < 60°
	904771 KonstruX SK 10 x 155 mm	1,2	2704	1577	1036	630
		1,9	1708	996	654	398
90° 	904773 KonstruX SK 10 x 220 mm	1,2	4110	1756	1082	640
		1,9	2596	1109	683	404
	904775 KonstruX SK 10 x 270 mm	1,2	5752	1840	1101	643
		1,9	3633	1162	695	406

MINIMUM DISTANCES FOR THE INSTALLATION

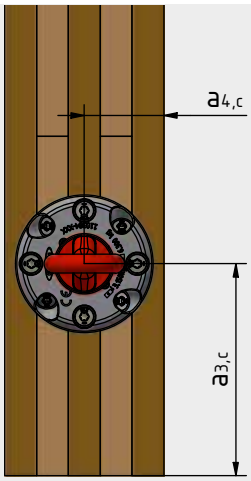
CLT FLOOR:

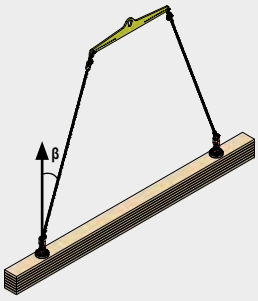




Powerring size	KonstruX-Screw d x L [mm x mm]	a min [mm]	
		90°	45° + 90° or 45°
XL	904771 KonstruX SK 10 x 155 mm	110	100
	904773 KonstruX SK 10 x 220 mm		140
	904776 KonstruX SK 10 x 300 mm		200
M	904792 KonstruX SK 8 x 155 mm	90	90
	904794 KonstruX SK 8 x 220 mm		140
	904797 KonstruX SK 8 x 295 mm		190
S	904858 KonstruX SK 6,5 x 100 mm	75	75

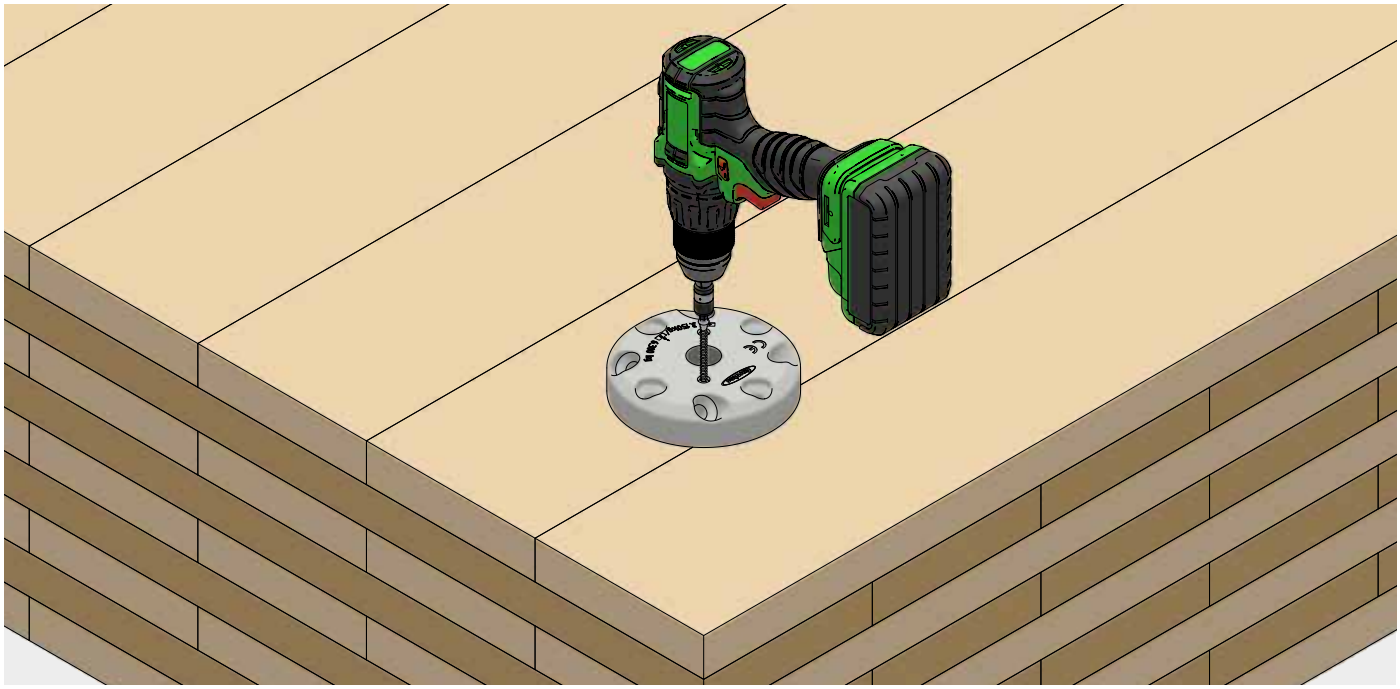
GLUED LAMINTATED TIMBER OR SAWN TIMBER BEAMS:



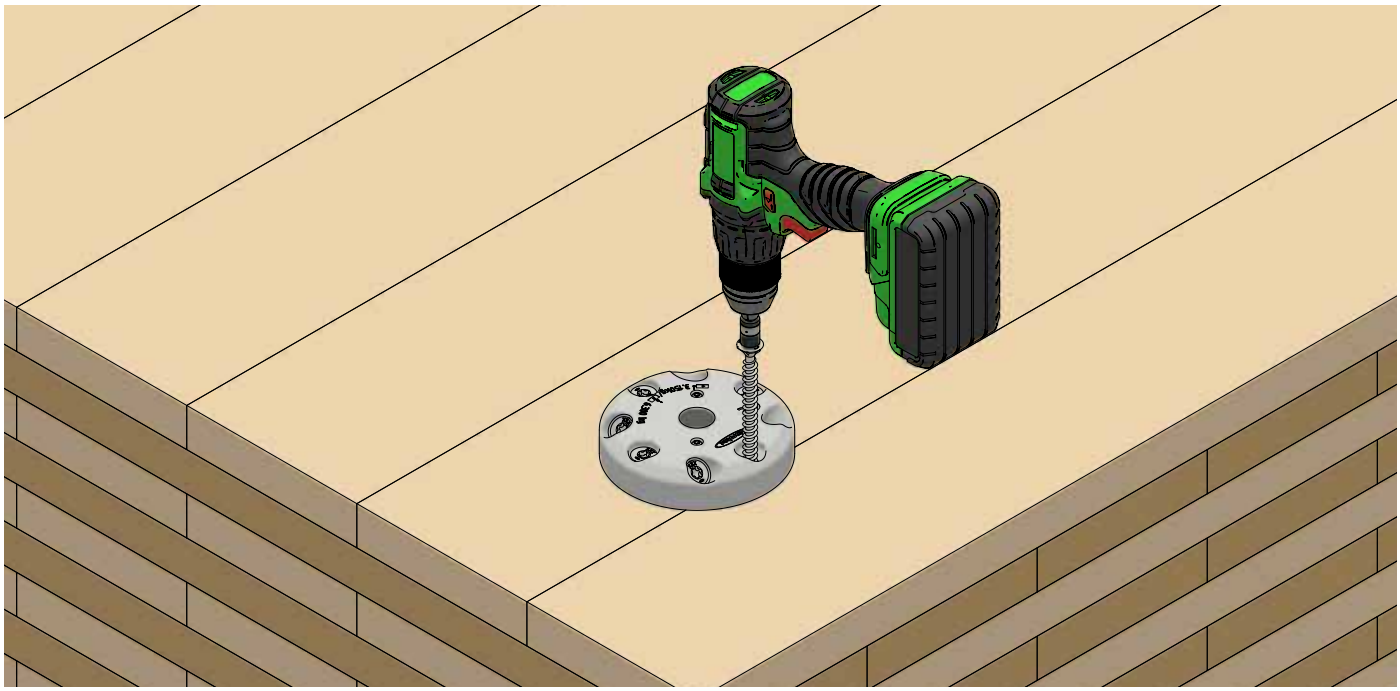


Powerring size	a 4,c [mm]	a 3,c [mm]
XL	50	100
M	40	80
S	35	65

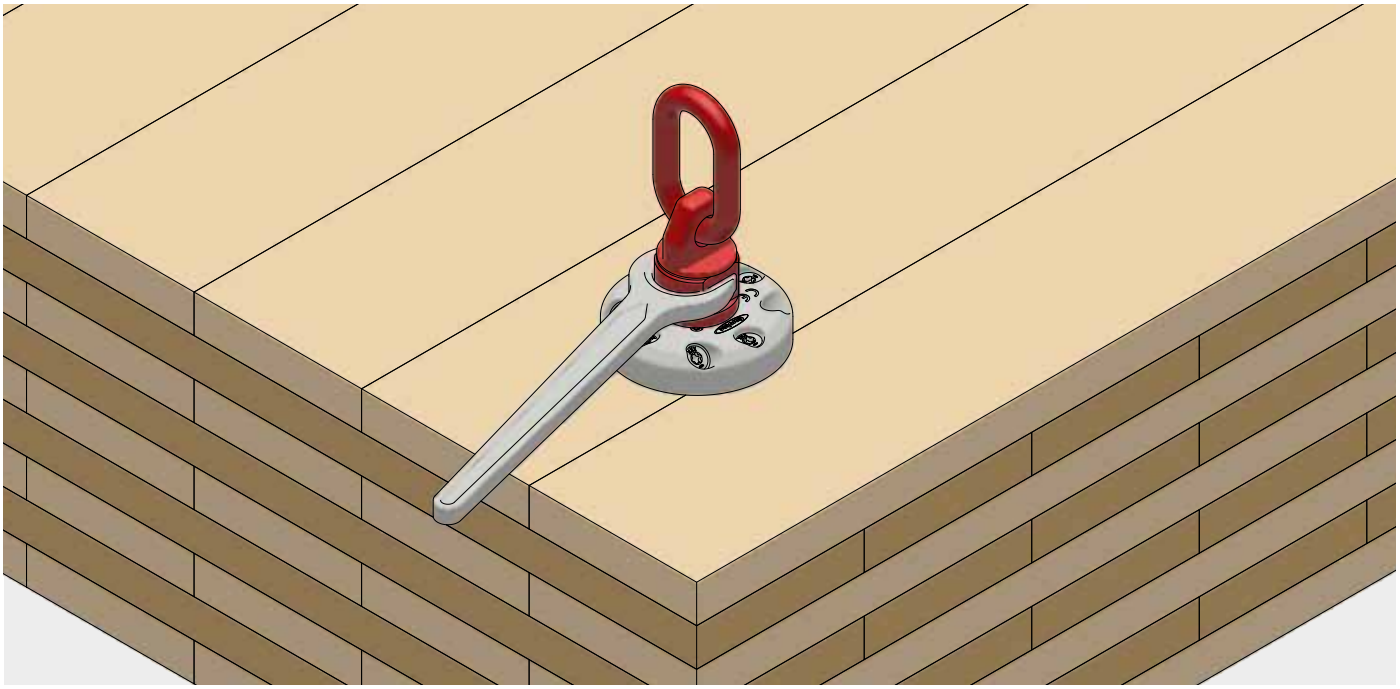
ASSEMBLY INSTRUCTIONS



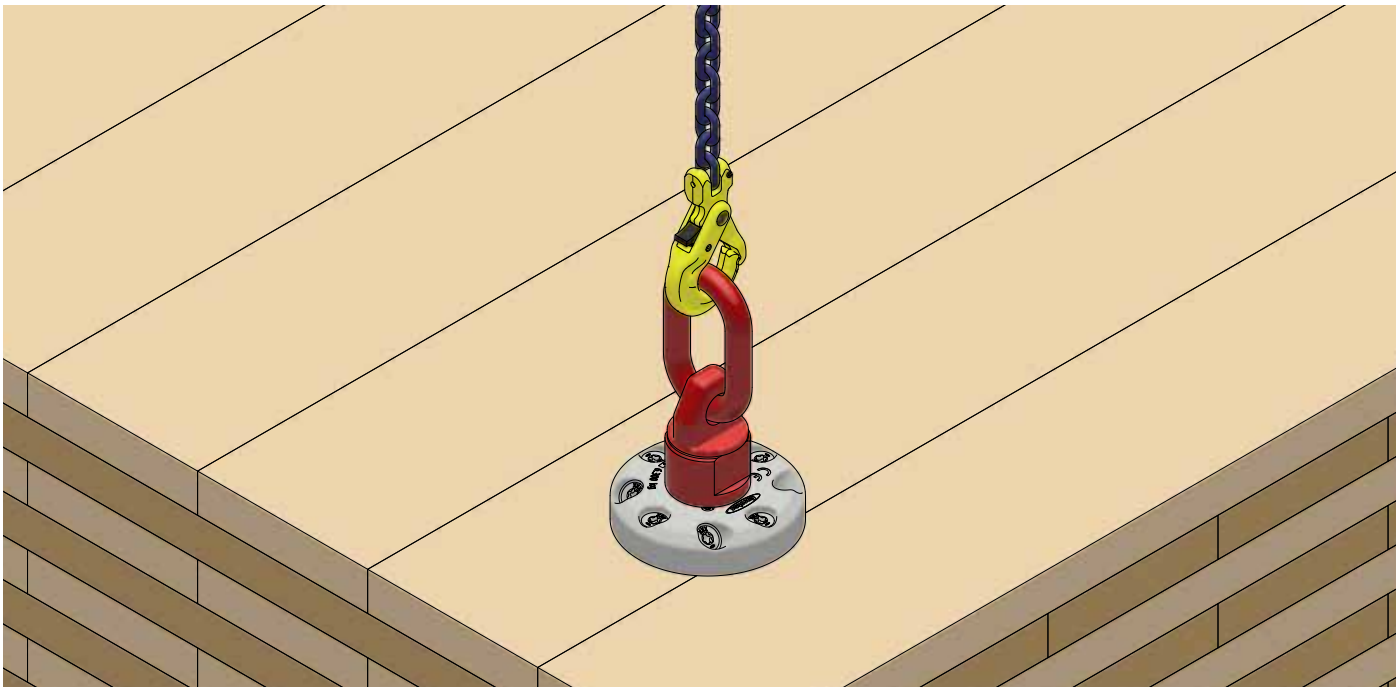
Step 1: *Position the Powerring correctly, observing the minimum distances, and fasten it with the appropriate screws (angle-bracket screw).*



Step 2: *Screw in the appropriate KonstruX screws according to the configuration (see technical data).*



Step 3: *Screw in and tighten the sling swivels.*



Step 4: *Hook in the Powerring at the predetermined angle (see technical data) and lift.*

TRILIFT

The Trilift lifting anchor is a transport solution that has beenspecially 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.

Art. no.	Dimensions [mm][a)]	Material	Max. load capacity [kg]	PU
954189	150 x 60 x 50	Steel - S235JR	1590	1

a) Length x Width x Height

ADVANTAGES / SPECIFICATIONS

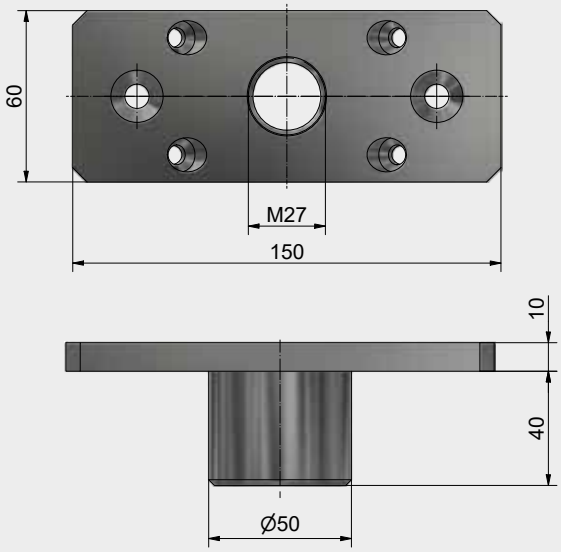
- Trouble-free operation with wall or component thicknesses of 80 mm or more.
- High force absorption despite the small installation space.
- Easy preparation of the component during timber frame construction.
- Easy to assemble – insert, screw in the screws and you're done.
- Flush with the component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

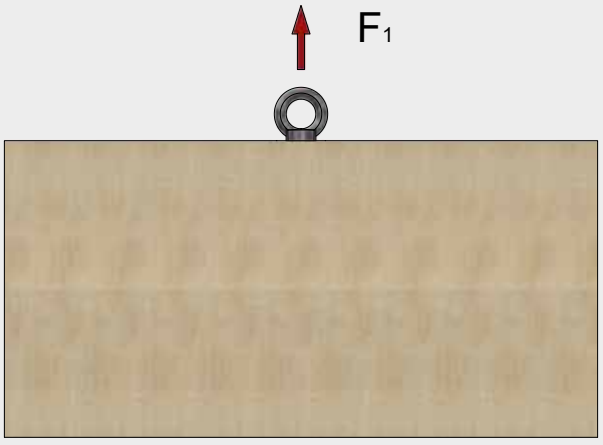
CONTENTS

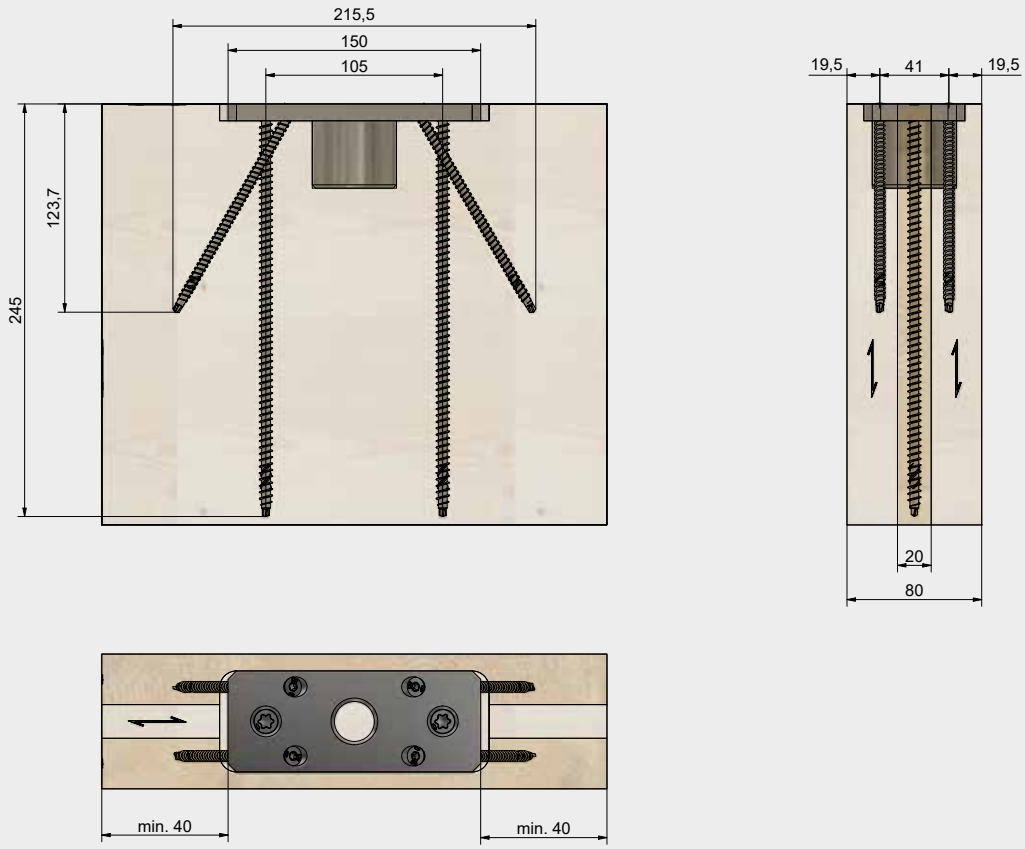
- 1x transport anchor cylinder
- 4x KonstruX ST SK Ø 6.5 x 140
- 2x KonstruX ST SK Ø 8 x 245

Notes

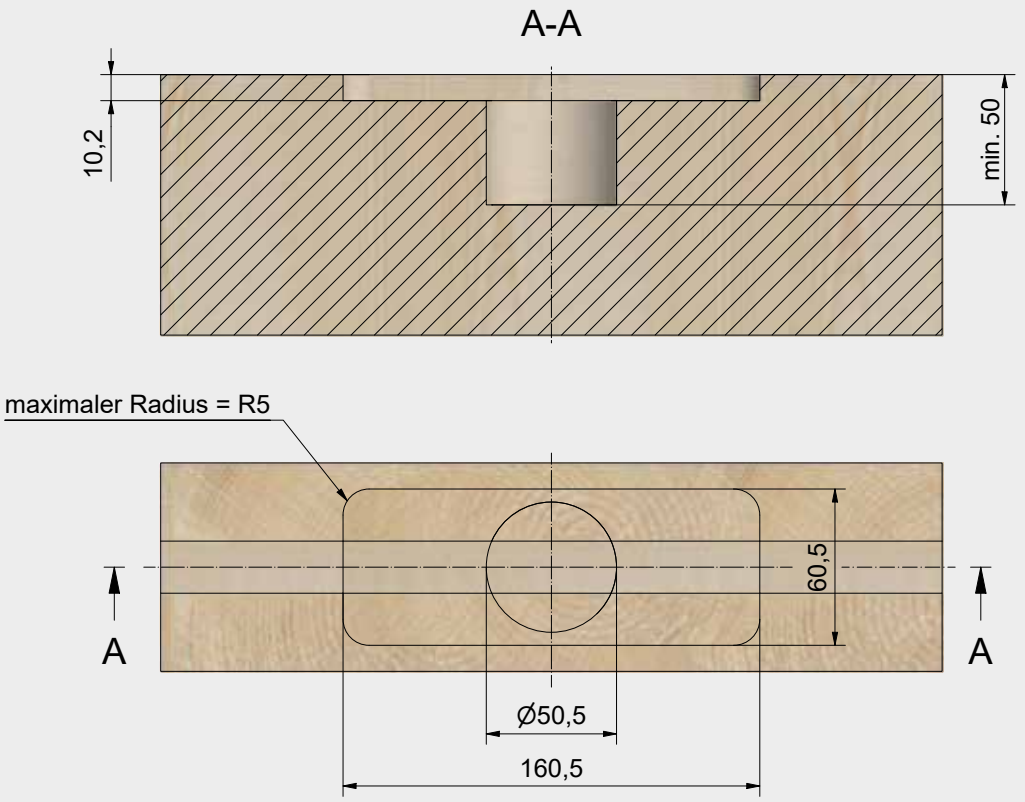
The eyebolt for the M27 internal thread is not included in the scope of delivery.







Empfehlung Abbund



TRILIFT LIFTING ANCHOR

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.

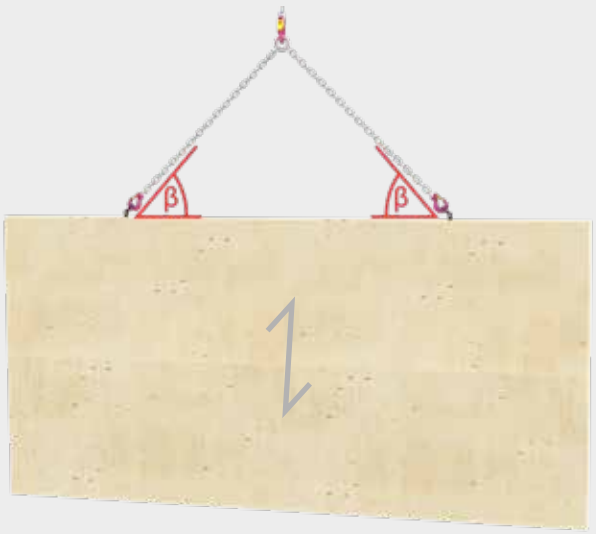
TECHNICAL INFORMATION

CLT PANEL WALL – RAISING

CLT panel wall – raising				
Fastening point	Screw image and installation angle		Stop angle	Total load bearing capacity [kg]
	90°	30°	ß	with 2 legs
Narrow-edged front side	2 x KonstruX 8 x 245 mm	6 x KonstruX 6,5 x 140 mm	45°	1106
			60°	1292
			75°	2200
			B	with n legs
			90°	n x 1590

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: ρ_k= 350 kg/m³ (C24) for the CLT panels and ρ_k= 385 kg/m³ (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 φ = 2.0 and a partial safety factor of $\gamma_{}$ = 1.35 were used. For other ϕ values, the table values must be multiplied by 2.0/φ.
- A modification factor k_{mod} = 1.0 and a partial safety coefficient for wood of γ_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.



TRILIFT LIFTING ANCHOR

TECHNICAL DATA:

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°	ß	with 2 legs
Narrow-edged front side	2x KonstruX 8 x 245 mm	6x KonstruX 6,5 x 140 mm	45°	1305
			60°	1686
			75°	2555
			B	with n legs
			90°	n x 1590
End-grain surface			Stop angle	Total load bearing capacity [kg]
			ß	with 2 legs
			45°	1142
			60°	1516
			75°	2055
			B	with n legs
			90°	n x 1170

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: ρ_k= 350 kg/m³ (C24) for the CLT panels and ρ_k= 385 kg/m³ (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 φ = 2.0 and a partial safety factor of γ_s = 1.35 were used. For other ϕ values, the table values must be multiplied by 2.0/φ.
- A modification factor k_{mod} = 1.0 and a partial safety coefficient for wood of γ_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.

LIFTING ANCHOR HEBEFIX AND BALL SUPPORTING BOLT

For transporting prefabricated wall modules

ETA
Europ. Techn. Bewertung
European Technical Assessment
ETA-19/0020

The HebeFix has been specially designed for use with a ball supporting bolt. The HebeFix can be used to transport prefabricated wall modules. Thanks to the use of screws, the anchor can be used multiple times. There are 8 screws included in delivery.

The product only works in combination with the intended ball supporting bolt Ø 20 mm, length 50 mm. The specifications of the product data sheet must be fully complied with! Please consult our technology department and download the product data sheet from our www.eurotec.team website.

Art. no.	Product name	Dimensions [mm][a)]	Material	PU*
944892	Hebe*Fix*	80 x 40	SJ235	4

a) Height x diameter

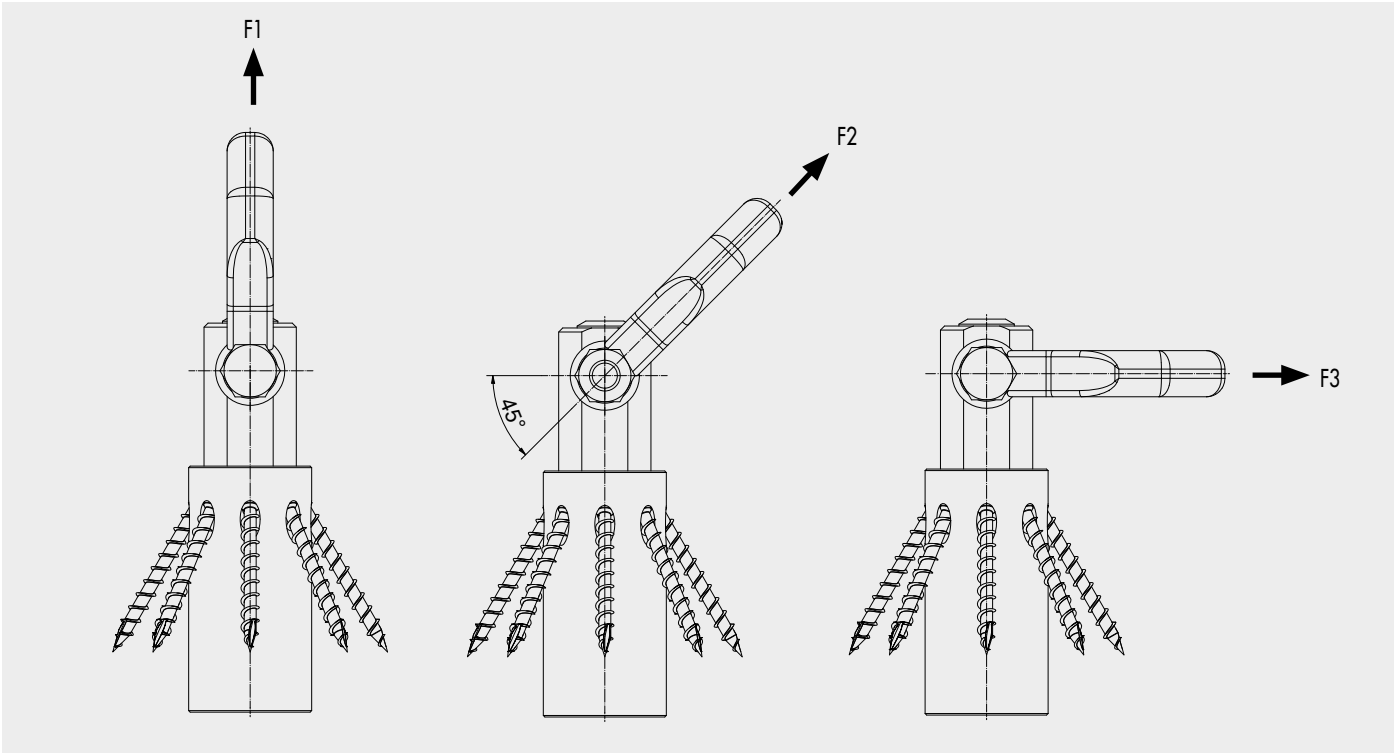
*Delivery including screws

Art. no.	Product name	Dimensions [mm][a)]	Material	F1 [kN]	F2 [kN]	F3 [kN]	PU
944893	Ball supporting bolt	50 x 20	SJ235	10	8,5	6,5	1

a) Height x diameter

Attention **This product is subject to important conditions! Please watch the application video and observe the instructions for use.**

LIFTING ANCHOR HEBEFIX
APPLICATION VIDEO



Independent shank alignment in the direction of the force.

APPLICATION IMAGE

Application HebeFix for transporting a wall.

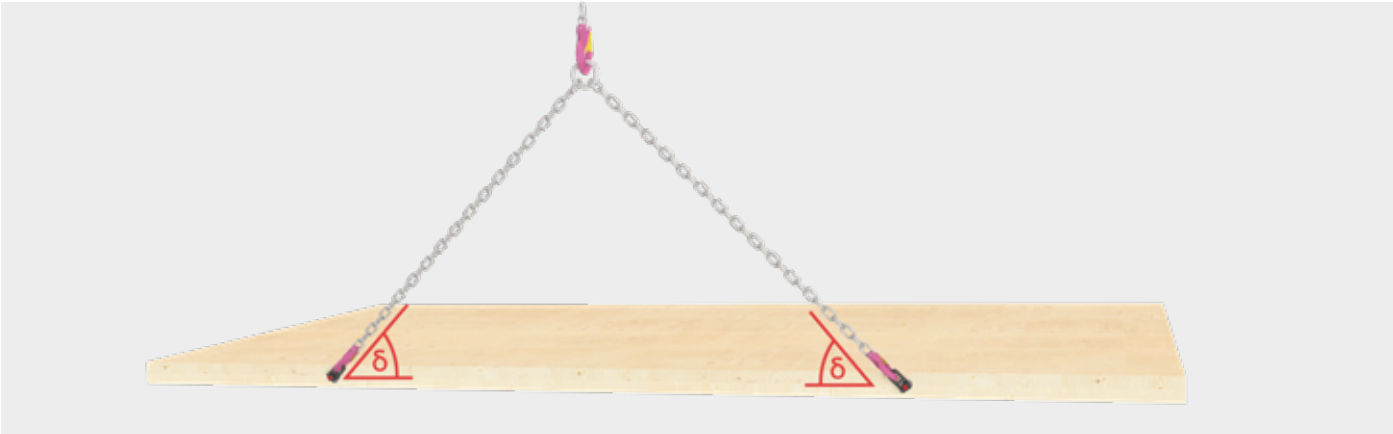
LIFTING ANCHOR HEBEFIX

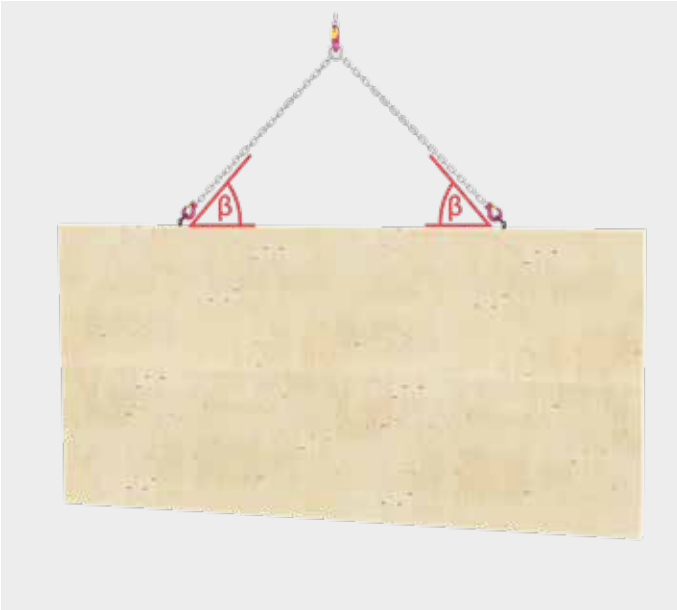
Europ. Techn. Bewertung
European Technical Assessment
ETA-19/0020

TECHNICAL DATA:

Wall or beam horizontal: raise, then lift

CLT wall or beam			
Connection in the	Connector [mm]	Stop angle β	Total weight [kg] for 2 legs
End-grain surface	Hebe*Fix* Ø 40 + 8 x VSS 6 x 60	30°	444
		45°	528
		60°	569
		75°	588
		β	with n legs
		90°	n x 297



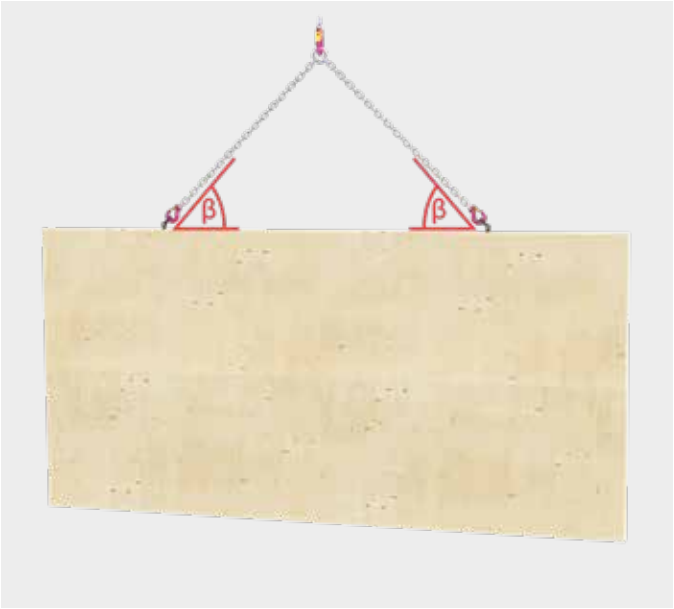


Note
The tables show the load case "Bringing a horizontal wall or a horizontal beam into a vertical position and then lifting it" (lifting from the horizontal to hanging in the vertical). The connectors must be screwed into the components' central plane, so that they sit flush and at right angles to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

TECHNICAL DATA:

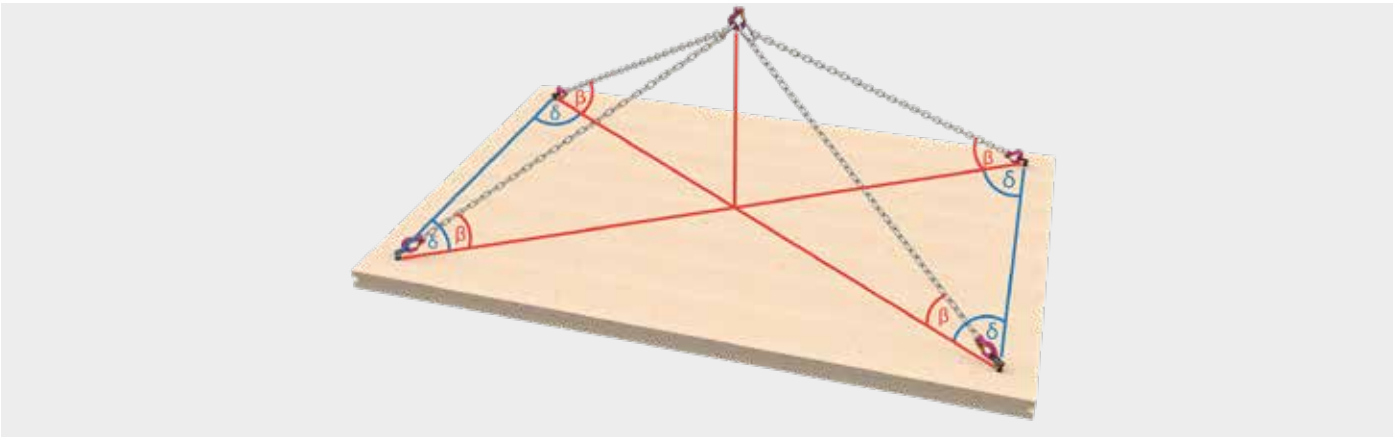
HORIZONTAL WALL OR BEAM: SET UPRIGHT, THEN LIFT

CLT wall or beam			
Connection in the	Connector [mm]	Stop angle β	Total weight [kg] for 2 legs
End grain area	Hebe*Fix* Ø 40 + 8 x VSS 6 x 60	30°	601
		45°	886
		60°	1135
		75°	1311
		β	with n legs
		90°	n x 688



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 the lifting or assembly conditions.

Ceiling horizontal: lifting



CLT ceiling

(Table on the next page)

Attention: Check the assumptions that have been made. The specified values, type and number of connecting means represent a preliminary design. The projects must always be designed by authorised persons and in accordance with the state building regulations [LBauO]. Please contact a qualified structural engineer to obtain a proof of stability certificate in accordance with the state building regulations [LBauO] for a fee. We will be happy to put you in touch with someone.

CLT ceiling				
Connection in the	Connector [mm]	Stop angle β	Layout angle δ	Total weight [kg] with 4 legs
Lateral surface	Hebe*Fix* + 8 x VSS 6 x 60	30°	5°	1193
			15°	1121
			25°	1015
			35°	911
			45°	824
			60°	732
			75°	682
		45°	5°	1762
			15°	1683
			25°	1559
			35°	1429
			45°	1314
			60°	1187
			75°	1091
		60°	5°	2262
			15°	2205
			25°	2108
			35°	1995
			45°	1887
			60°	1756
			75°	1649
		75°	5°	2620
			15°	2600
			25°	2564
			35°	2518
			45°	2469
			60°	2401
			75°	2339
		β	δ	with 2 legs
		30°	0°	1203
			90°	333
		45°	0°	1773
			90°	545
		60°	0°	2270
			90°	824
		75°	0°	2623
			90°	1169
		β	δ	with n legs
		90°	0°	688

Note
The tables show the load case "Lifting horizontal ceiling elements" (lifting from the horizontal to hanging in the vertical). The connectors must be screwed in flush with the surface and at a right angle to the component surface.

OPERATING INSTRUCTIONS BALL SUPPORTING BOLT

WARNING!
Ball supporting bolts are designed for lifting and holding individual loads **(not people!). In addition, they are not suitable for continuous load rotation.** Contaminations, e.g. grinding sludge, oil and emulsion deposits, dust, etc. can impair the ball supporting bolts' functionality.

Damaged ball supporting bolts can endanger lives. Before every use, the ball supporting bolts must be inspected for visible defects, e.g. deformations, breaks, cracks, damage, missing balls, corrosion, function of the unlocking mechanism.
Damaged ball supporting bolts must be withdrawn from further use.

HANDLING AND LOADING
To release the balls, press the button (A). When the button (A) is released, the balls are locked again.
Attention: The button (A) is locked when the spring force has caused it to return to its original position. Do not press the button while it is under load!
The load values F1/F2/F3 (see below) apply to lifting applications with a Steel load-handling device and x min. = 1.5 mm.

MAINTENANCE
Ball supporting bolts must be subjected to a safety inspection by a competent person at least once a year.

VISUAL INSPECTION
Deformations, breaks, cracks, missing/damaged balls, corrosion, damage to the screw connection on the shackle.

FUNCTIONAL TEST
The balls' locking and unlocking mechanism must close automatically by spring force. Full shackle mobility is guaranteed.

d_1	l_1	d_2	d_3	d_4 min.	l_2	l_3	l_4	l_5	l_6	l_7	l_8	x min.*	x max.*	D H11	F_1 kN*	F_2 kN*	F_3 kN*
20,0	50	24,50	30,0	25,00	19,70	36,5	52,0	32,6	36	56	114,0	1,5	25	20,0	10,0	8,5	6,5

*With 5-fold protection against breakage

Original EC conformity mark
The product complies with the provisions of EC Directive 2006/42/EC.

Make:	Ball stud
Type:	EH 22350
Applied standards:	DIN EN 13155

CE

Attention: Check the assumptions that have been made. The specified values, type and number of connecting means represent a preliminary design. The projects must always be designed by authorised persons and in accordance with the state building regulations [LBauO]. Please contact a qualified structural engineer to obtain a proof of stability certificate in accordance with the state building regulations [LBauO] for a fee. We will be happy to put you in touch with someone.

LIFTING ANCHOR HEBEFIX MINI AND BALL SUPPORTING BOLT

For transporting small elements

The HebeFix Mini is particularly suitable for transporting smaller loads, such as beams or supports. Since the inner diameter has been reduced from Ø 20 mm (HebeFix) to Ø 16 mm (HebeFix Mini), there is now also a new smaller ball supporting bolt.
One special feature of the HebeFix Mini is a stop on the upper edge, which makes assembly easier when dealing with a through hole.

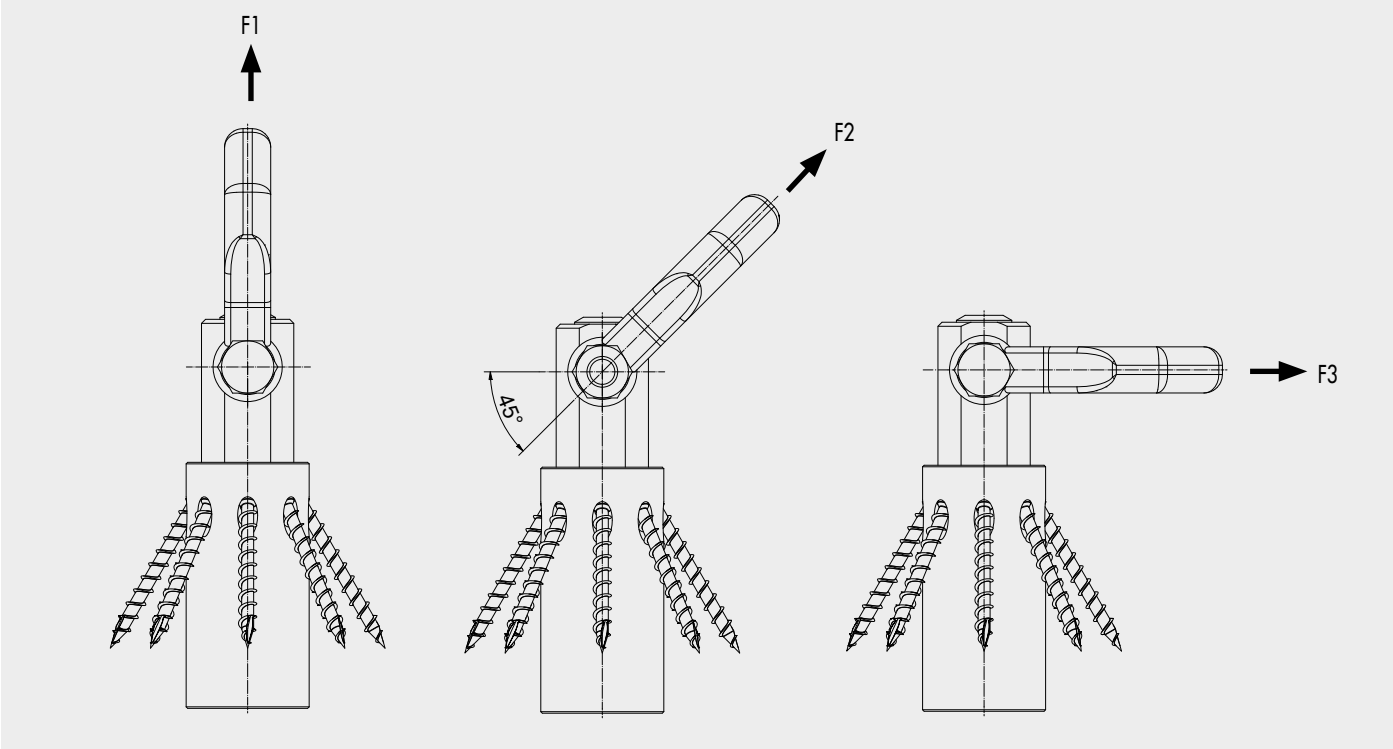
Art. no.	Product name	Dimensions [mm][a)]	Material	Number of screws*	PU
944901	Lifting anchor HebeFix Mini	49 x 45	S235JR	8	4

a) Height x diameter
* Incl. 8 fully threaded screw TX25 6,0 x 60

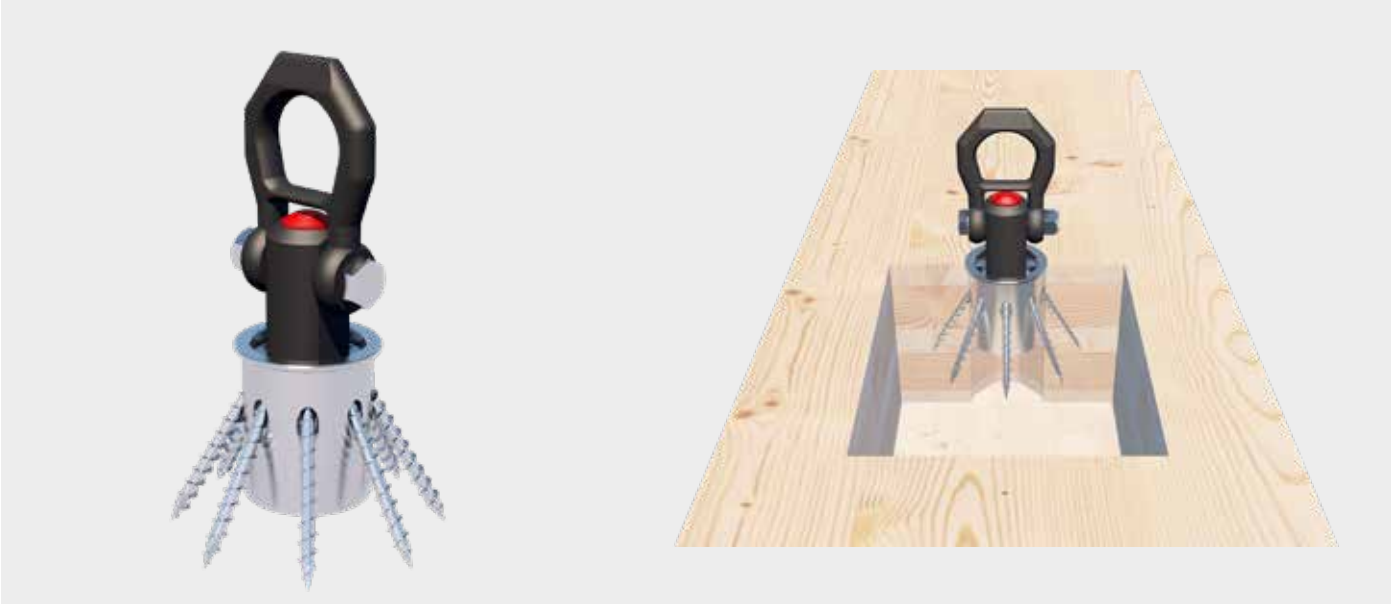
Art. no.	Product name	Dimensions [mm][a)]	Material	F1 [kN]	F2 [kN]	F3 [kN]	PU
944905	Ball supporting bolt for HebeFix Mini	25 x 16	SJ235	4,8	4,5	4,1	1

a) Height x diameter

Note
Both items must be ordered separately from each other.



STOP AT THE UPPER EDGE
SOON ALSO AVAILABLE
FOR THE LARGE HEBEFIX



The lifting anchor HebeFix Mini in combination with the ball supporting bolt.

APPLICATION IMAGE

The rotating ball supporting bolt allows for flexible transports.

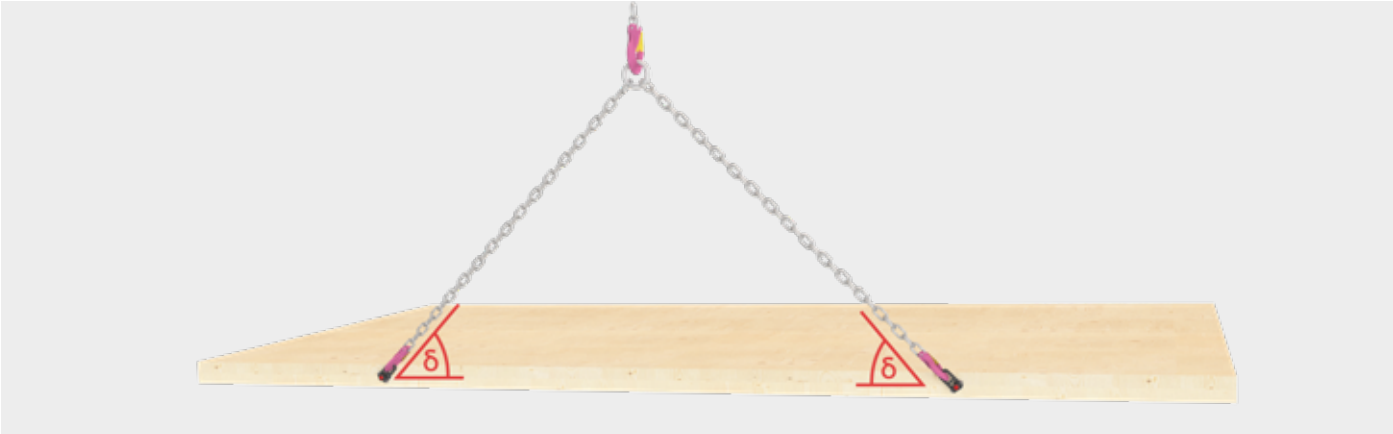
LIFTING ANCHOR HEBEFIX MINI

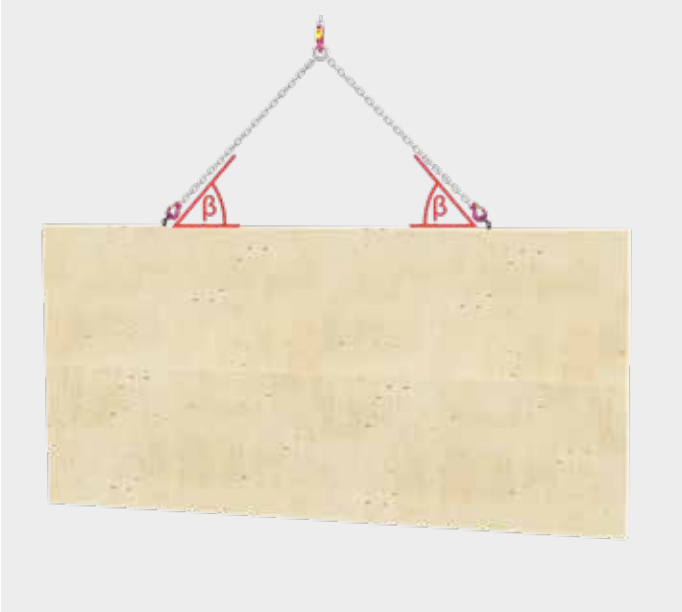
Europ. Techn. Bewertung
European Technical Assessment
ETA-19/0020

TECHNICAL DATA:

Wall or beam horizontal: raise, then lift

CLT wall or beam			
Connection in the	Connector [mm]	Stop angle β	Total weight [kg] with 2 legs
End grain area	Hebe*Fix* Mini Ø 40 + 8 x VSS 6 x 60	30°	248
		45°	295
		60°	318
		75°	328
		β	with n legs
		90°	n x 166



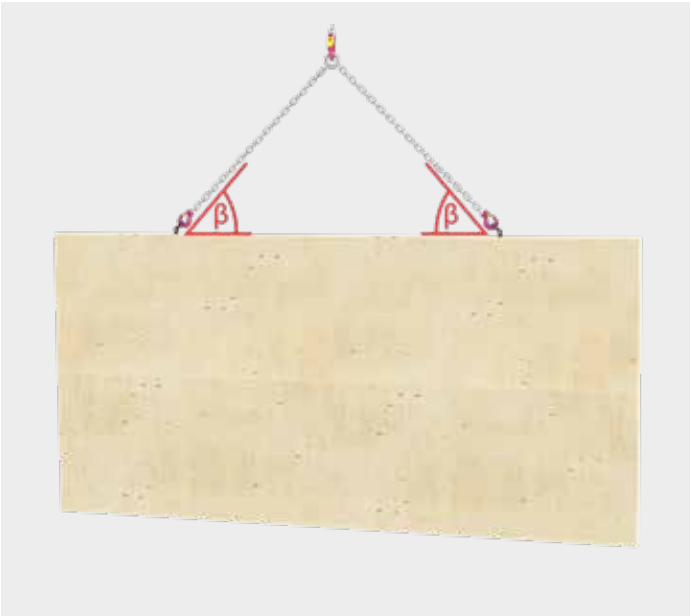


Note
The tables show the load case "Bringing a horizontal wall or a horizontal beam into a vertical position and then lifting it" (lifting from the horizontal to hanging in the vertical). The connectors must be screwed into the components' central plane, so that they sit flush and at right angles to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

TECHNICAL INFORMATION

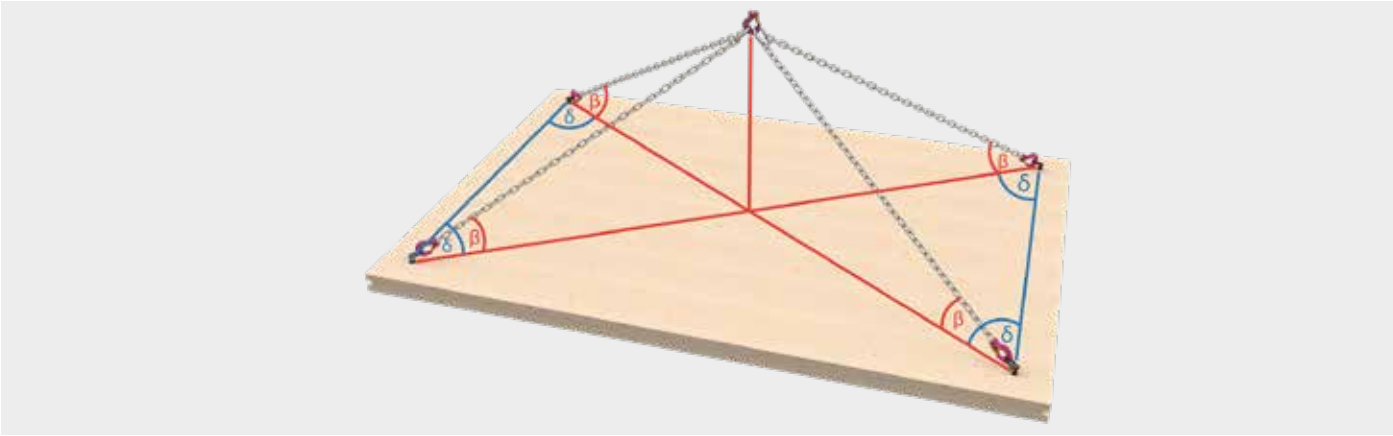
Wall or beam vertical: lifting

CLT wall or beam			
Connection in the	Connectior [mm]	Stop angle β	Total weight [kg] with 2 legs
Side area	Hebe*Fix* Mini Ø 40 + 8 x VSS 6 x 60	30°	360
		45°	585
		60°	869
		75°	1196
		β	with n legs
		90°	n x 688



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.

Ceiling horizontal: lifting



CLT ceiling

(Table on the next page)

Attention: Check the assumptions that have been made. The specified values, type and number of connecting means represent a preliminary design. The projects must always be designed by authorised persons and in accordance with the state building regulations [LBauO]. Please contact a qualified structural engineer to obtain a proof of stability certificate in accordance with the state building regulations [LBauO] for a fee. We will be happy to put you in touch with someone.

CLT ceiling				
Connection in the	Connectior [mm]	Stop angle	Layout angle	Total weight [kg]
		β	δ	with 4 legs
Side area	Hebe*Fix* Mini + 8 x VSS 6 x 60	30°	5°	714
			15°	665
			25°	595
			35°	529
			45°	475
			60°	419
			75°	389
		45°	5°	1161
			15°	1091
			25°	986
			35°	884
			45°	799
			60°	710
			75°	645
		60°	5°	1727
			15°	1648
			25°	1524
			35°	1394
			45°	1281
			60°	1155
			75°	1061
		75°	5°	2385
			15°	2339
			25°	2257
			35°	2160
			45°	2063
			60°	1943
			75°	1841
		β	δ	with 2 legs
		30°	0°	721
			90°	189
		45°	0°	1171
			90°	322
		60°	0°	1738
			90°	530
		75°	0°	2392
			90°	920
		β	δ	with n legs
		90°	0°	n x 688

Note
The tables show the load case "Lifting horizontal ceiling elements" (lifting from the horizontal to hanging in the vertical). The connectors must be screwed in flush with the surface and at a right angle to the component surface.

OPERATING INSTRUCTIONS BALL SUPPORTING BOLT

WARNING!
Ball supporting bolts are designed for lifting and holding individual loads **(not people!). In addition, they are not suitable for continuous load rotation**. Contaminations, e.g. grinding sludge, oil and emulsion deposits, dust, etc. can impair the ball supporting bolts' functionality.

Damaged ball supporting bolts can endanger lives. Before every use, the ball supporting bolts must be inspected for visible defects, e.g. deformations, breaks, cracks, damage, missing balls, corrosion, function of the unlocking mechanism.
Damaged ball supporting bolts must be withdrawn from further use.

HANDLING AND LOADING
To release the balls, press the button (A). When the button (A) is released, the balls are locked again.
Attention: The button (A) is locked when the spring force has caused it to return to its original position. Do not press the button while it is under load!
The load values F1/F2/F3 (see below) apply to lifting applications with a Steel load-handling device and x min. = 1.5 mm.

MAINTENANCE
Ball supporting bolts must be subjected to a safety inspection by a competent person at least once a year.

VISUAL INSPECTION
Deformations, breaks, cracks, missing/damaged balls, corrosion, damage to the screw connection on the shackle.

FUNCTIONAL TEST
The balls' locking and unlocking mechanism must close automatically by spring force. Full shackle mobility is guaranteed.

d_1	l_1	d_2	d_3	d_4 min.	l_2	l_3	l_4	l_5	l_6	l_7	l_8	x min.*	x max.*	D H11	F_1 kN*	F_2 kN*	F_3 kN*
20,0	50	24,50	30,0	25,00	19,70	36,5	52,0	32,6	36	56	114,0	1,5	25	20,0	10,0	8,5	6,5

*With 5-fold protection against breakage

Original EC conformity mark
The product complies with the provisions of EC Directive 2006/42/EC.

Make:	Ball stud
Type:	EH 22350
Angewandte Normen:	DIN EN 13155

CE

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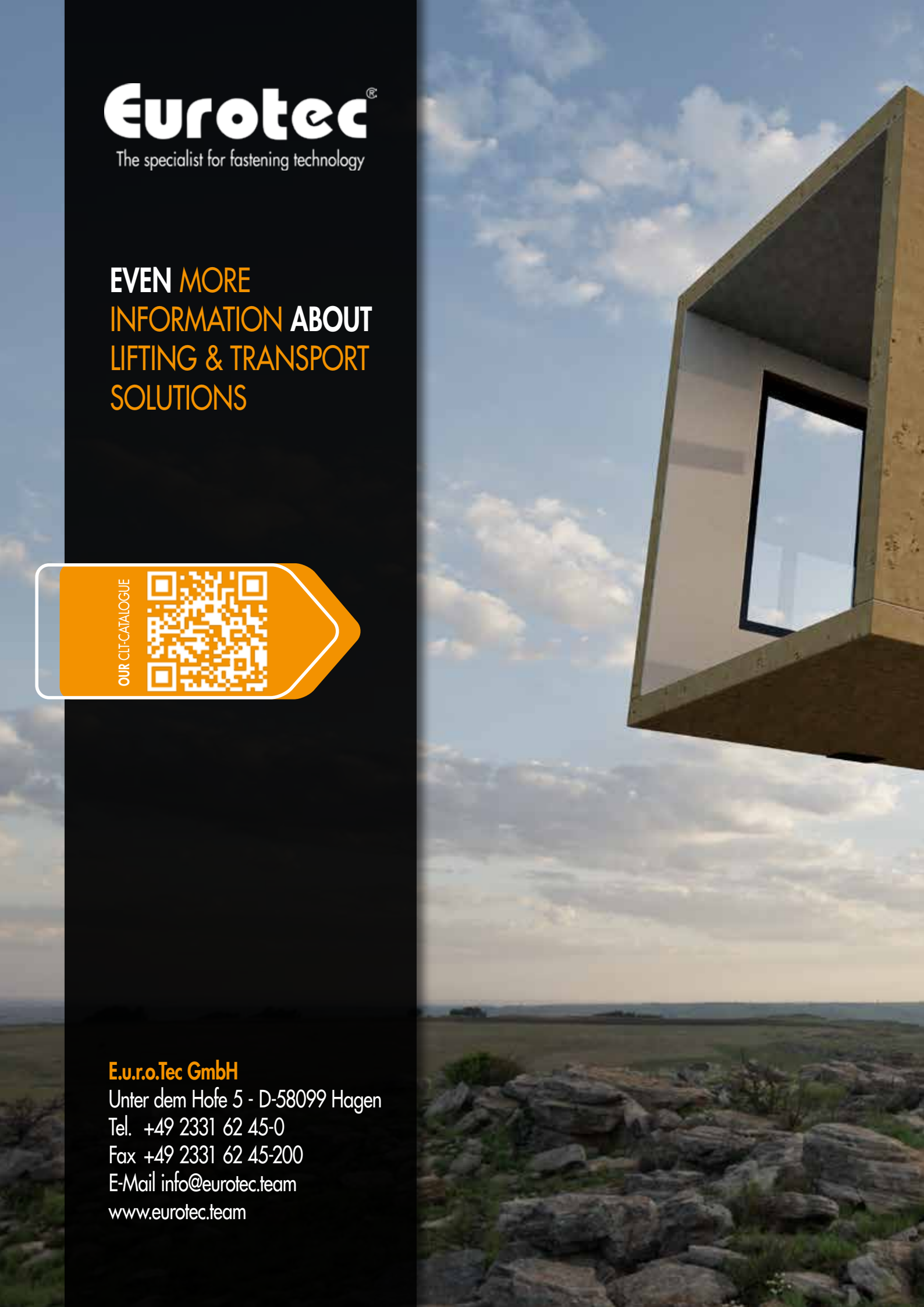
Eurotec®

The specialist for fastening technology

EVEN MORE INFORMATION ABOUT LIFTING & TRANSPORT SOLUTIONS

OUR CLT-CATALOGUE



E.u.r.o.Tec GmbH
Unter dem Hofe 5 - D-58099 Hagen
Tel. +49 2331 62 45-0
Fax +49 2331 62 45-200
E-Mail info@eurotec.team
www.eurotec.team