

Urs and Urs mini tie bars

Anchor timber-frame constructions securely against tension

The problem

- Loading condition 1: loading in the plane of the wall
- Loading condition 2: loading transverse to the plane of the wall
- Single and double shear

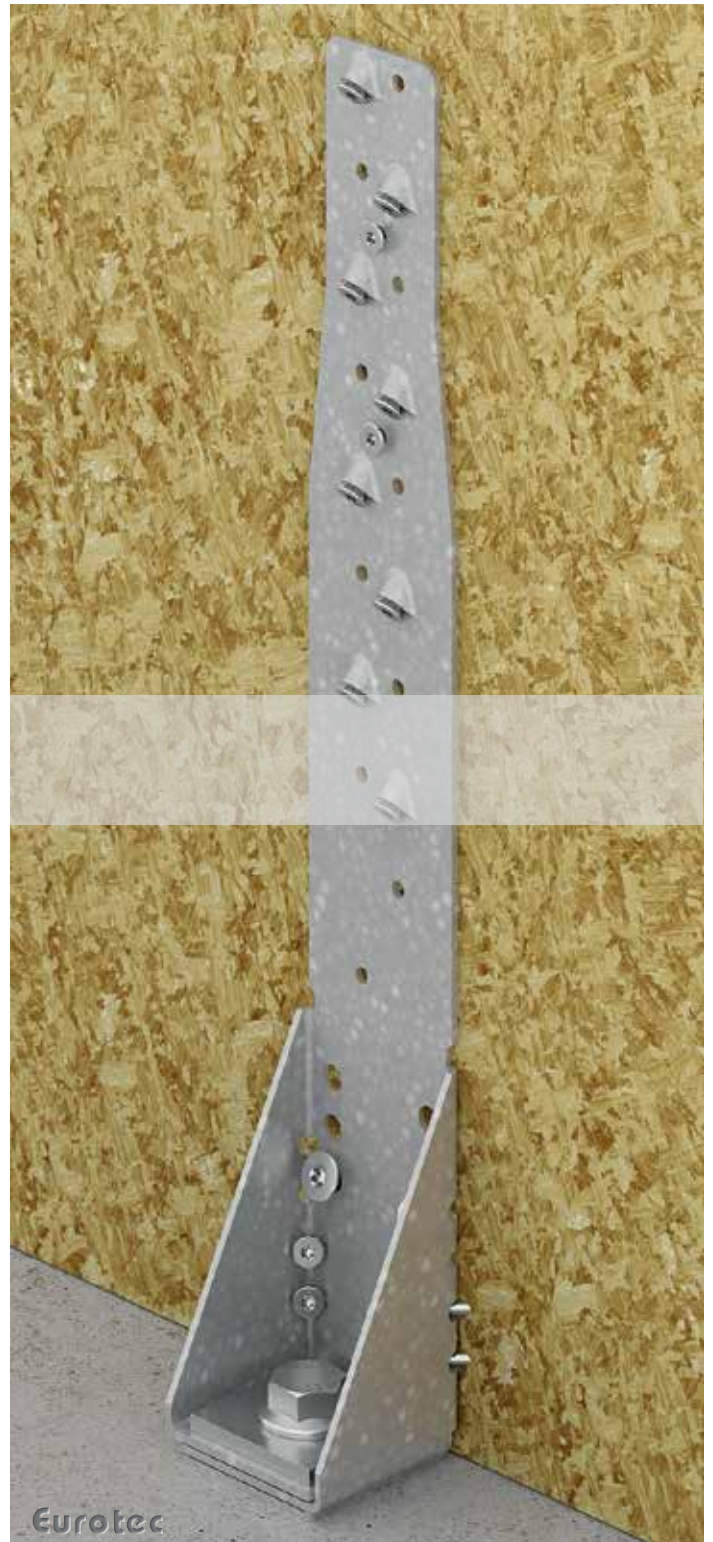
The solution

- Resolving forces solves problems

The advantages

- Screwing onto OSB/Fermacell® butt joint
- Assembly tolerance of 30 mm on the construction site
- Tension strap disappears into planking area
- Disappears into 180 mm screed area
- Supplied with fastening set
- With static calculation and mark of conformity
- Tension and longitudinal-shear anchoring (13,4 kN/1,3 kN)

The galvanised Urs and Urs mini tie bars can safely dissipate tensile and longitudinal-shear forces through the intermediate layer with no attenuation.



Urs tie bar

incl. fastening set



Art. no.	Dimensions (mm)*	PU
954047	410 x 60 x 65 x 2,5	10

* Height x length x width x depth

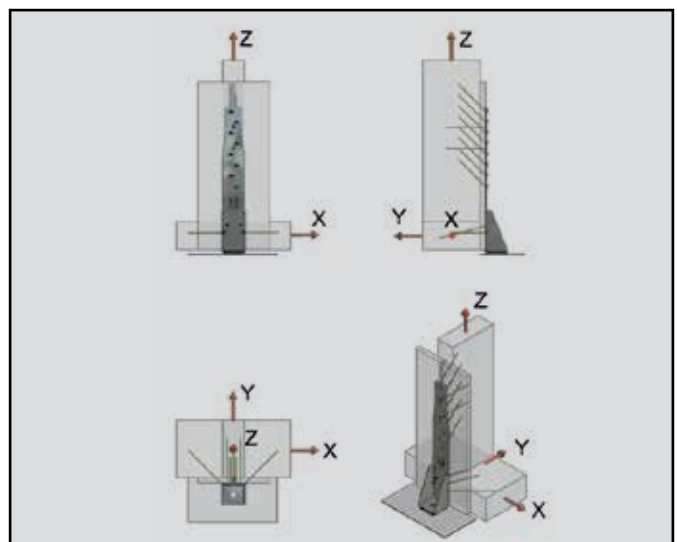
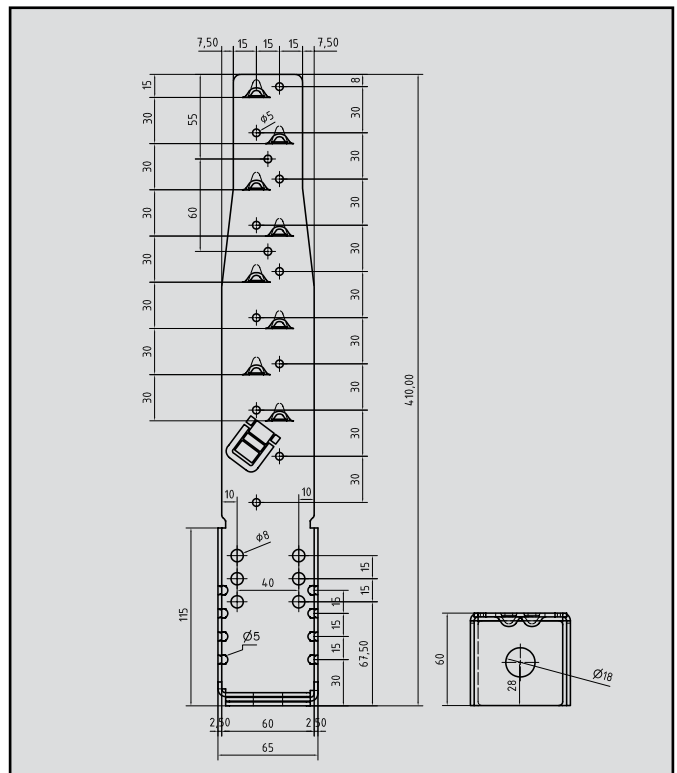
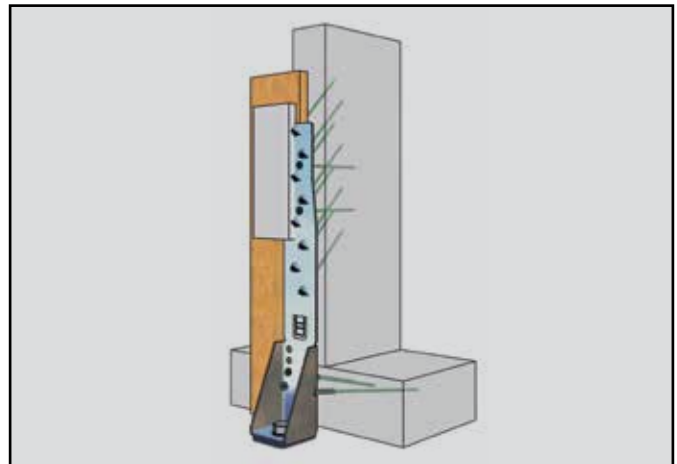
The newly developed Urs and Urs mini tie connectors (mark of conformity in accordance with DIN 1052) are one solution for the problems just mentioned. The Urs tie bar transfers the tension and longitudinal shear forces into the anchoring system via a slanted screw connection without exposing the intermediate layer (OSB or gypsum fibre board) to shearing. This solution means that edge distances of fasteners in the panel area are no longer critical. The slanted screw connection leads to the forces being resolved, so that the screw need only transfer tensile forces and the intermediate layer need only transfer compressive forces. Installation is easy:

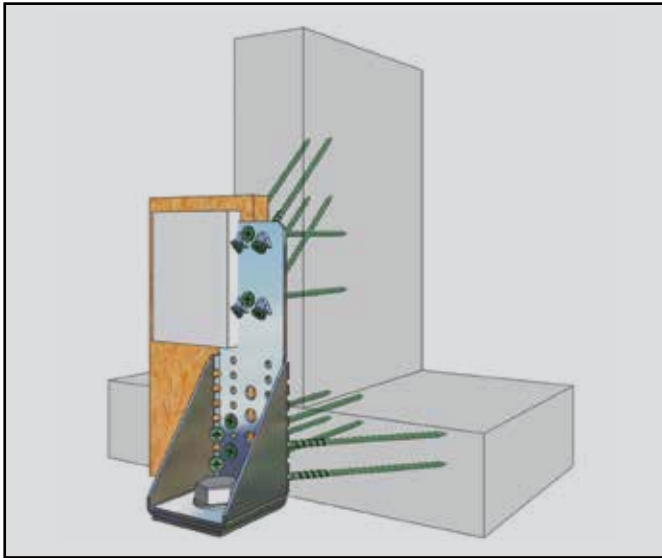
The fastener is simply positioned on the planking in the baseplate area and fastened to the post and the sill using slanted screws.

Here, the connection is capable of transferring tension and longitudinal-shear forces from loading conditions 1 and 2 via the slanted screws into the Urs tie bar and ultimately into the floor slab via a plug. The connector is available in the Urs and Urs mini tie bar versions.

Urs tie bar

	Max. tension	
Loading condition 1: wind load z x	$R_{z,d} = 13,4 \text{ kN}$	Wall thrust / $R_{x,d} = 1,3 \text{ kN}$
Loading condition 2: wind load z y	$R_{z,d} = 13,4 \text{ kN}$	Wind suction / $R_{y,d} = 2,1 \text{ kN}$
	$R_{z,d} = 13,4 \text{ kN}$	Wind pressure / $R_{y,d} = 1,2 \text{ kN}$





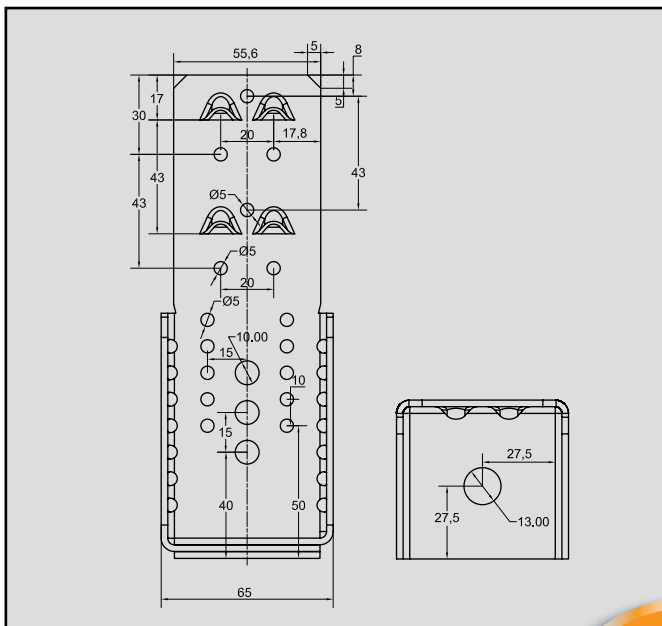
Urs mini tie bar

incl. fastening set



Art. no.	Dimensions (mm)*	PU
954048	180 x 60 x 65 x 2,5	10

* Height x length x width x depth



Slanted screw connection

At the construction site, the Urs mini tie bar is placed on the planking and fastened to the timber post through the OSB/Fermacell® panel using the patented slanted screw connection.

Directly from the post into the Urs mini tie bar

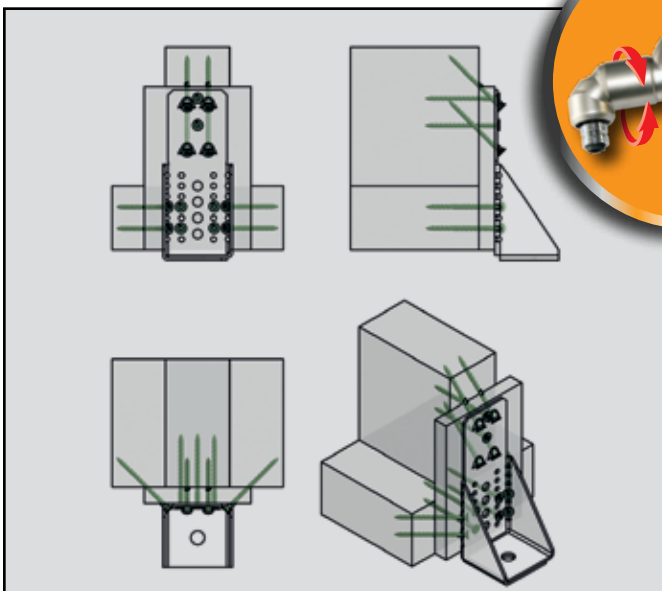
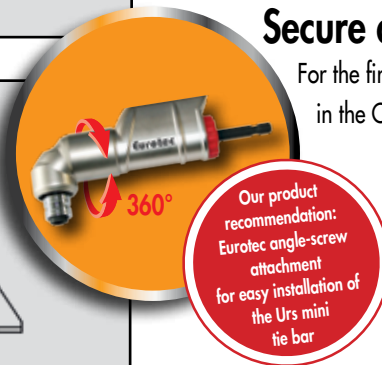
The forces are transferred directly into the Urs mini tie bar via the supplied screws without subjecting the screws to shearing. The compressive component resulting from resolution of the forces is dissipated via the OSB/Fermacell® panel.

Assembly tolerance 30 mm For all three force directions

Anchoring with the Urs mini tie bar is intended for the three loading directions z, x and y.

Secure anchoring in the butt joint

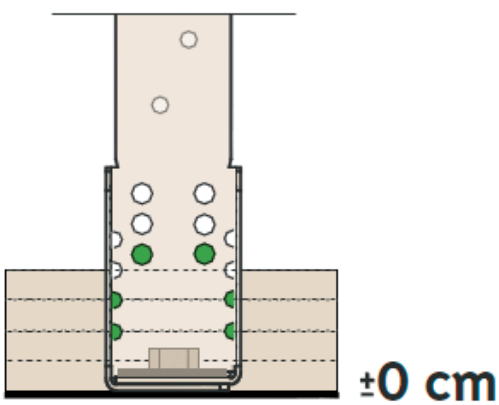
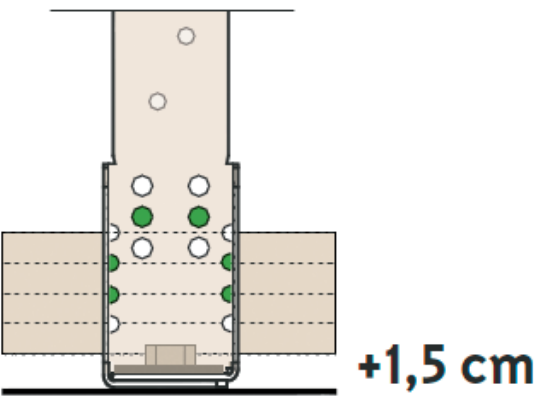
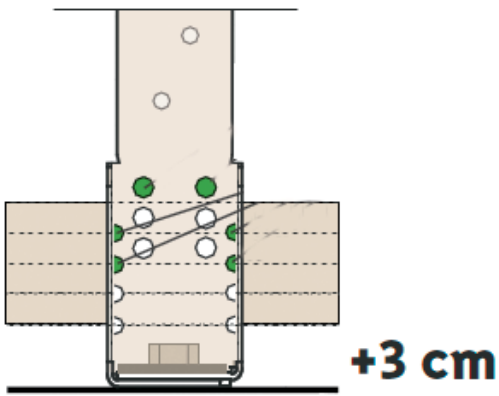
For the first time, an anchorage can also be used reliably in the OSB/Fermacell® butt joint without attenuation.



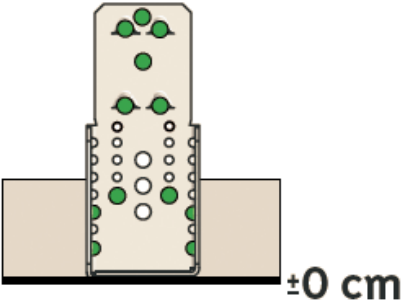
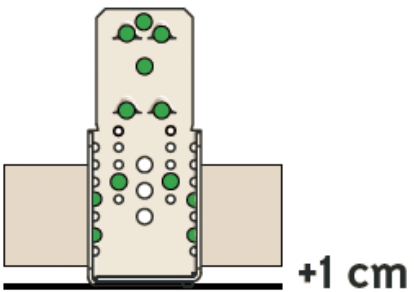
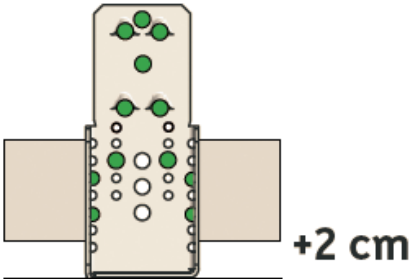
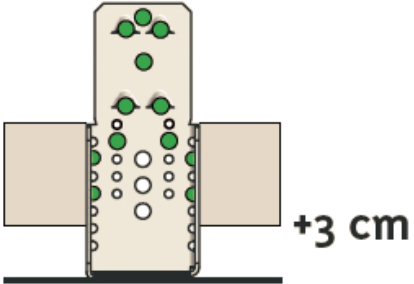
Urs mini tie bar

	Max. tension	
Loading condition 1: wind load z x	$R_{z,d} = 6,4 \text{ kN}$	Wall thrust / $R_{x,d} = 2,1 \text{ kN}$
Loading condition 2: wind load z y	$R_{z,d} = 6,4 \text{ kN}$	Wind suction / $R_{y,d} = 1,7 \text{ kN}$
	$R_{z,d} = 6,4 \text{ kN}$	Wind pressure / $R_{y,d} = 2,5 \text{ kN}$

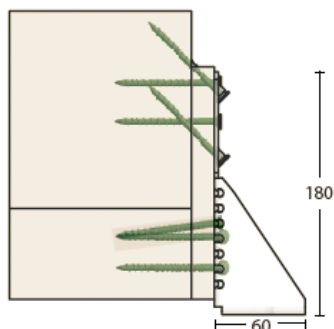
**Urs tie-bar
assembly instructions**



**Urs mini tie bar
assembly instructions**



Firstly the plug is installed in concrete, then the slanted screws are installed**



* use a high-quality drill bit with three cutting edges

Simply tie bar

Anchor timber-frame constructions securely against tension



For quick and easy connections

The Simply tie bar allows quick and easy timber-timber, timber-concrete, timber-steel and timber-brickwork connections.

It is especially sturdy and can withstand extremely high loads.

It is an alternative to the Urs/Urs mini tie bar. The Simply tie bar has nail holes on one side and screw holes (including a slot) in the other.

Simply LL* tie bar

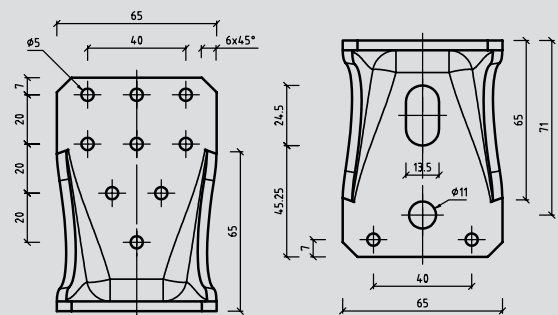
Slot, galvanised



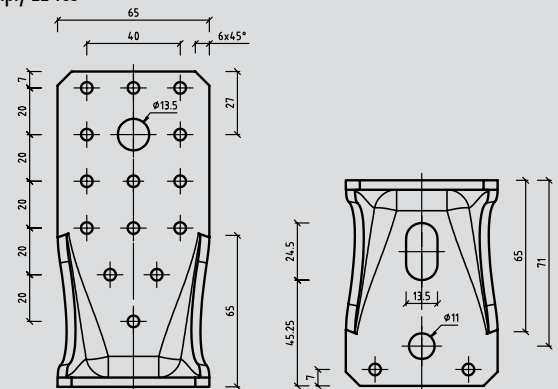
Art. no.	Dimensions (mm)*	PU
954056	95 x 88 x 65 x 4	25
954057	135 x 88 x 65 x 4	25
954058	285 x 88 x 65 x 4	25

* Height x length x width x depth

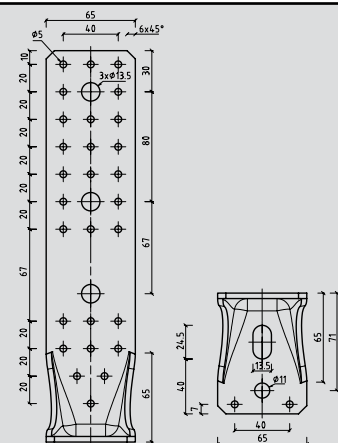
Simply LL 95



Simply LL 135



Simply LL 285



Tie bar	Holes	
	Ø mm	Quantity
Simply LL 95	5	9 + 2
	13,5 (x24,5)	0 + 1
	11	0 + 1
Simply LL 135	5	14 + 2
	13,5 (x24,5)	1 + 1
	11	0 + 1
Simply LL 285	5	28 + 2
	13,5 (x24,5)	3 + 1
	11	0 + 1

Angle bracket

Hot-dip galvanised steel

Angle bracket

with a rib



Art. no.	Dimensions ^{a)} (mm)	Drill holes ^{b)} (mm)	PU
904725	70 x 70 x 55	16 x 5 / 2 x 11	100
904726	90 x 90 x 65	20 x 5 / 2 x 11	100
904727	100 x 100 x 90	24 x 5 / 4 x 13	50

a) Length x width x height

b) Number x Ø

- High stability thanks to reinforced rib
- Excellent corrosion protection thanks to hot-dip galvanisation

