

# 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

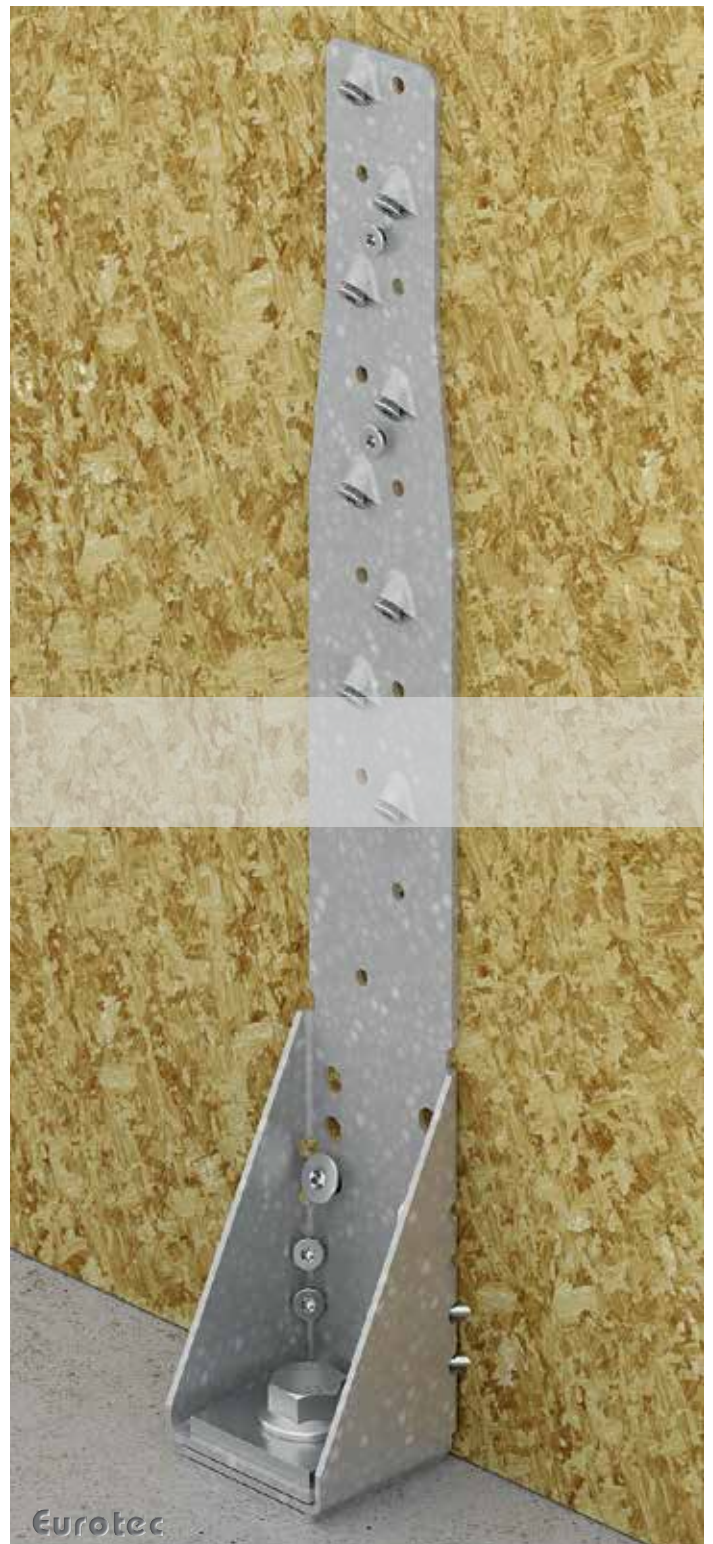
## The solution

- Resolving forces solves problems

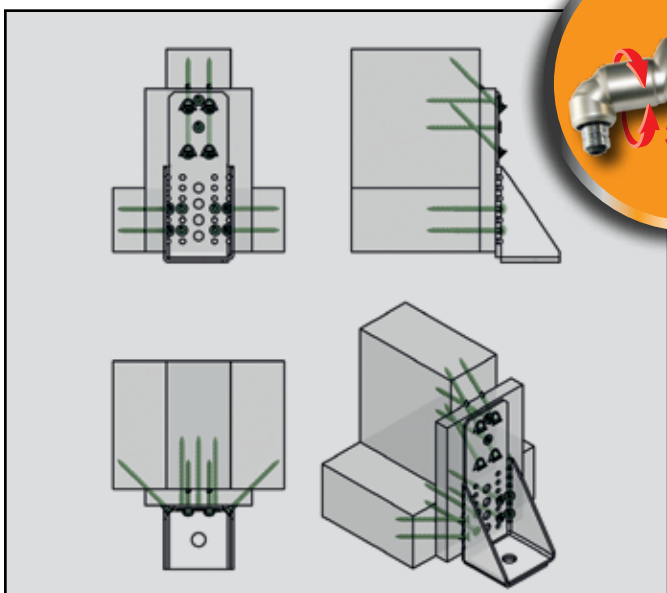
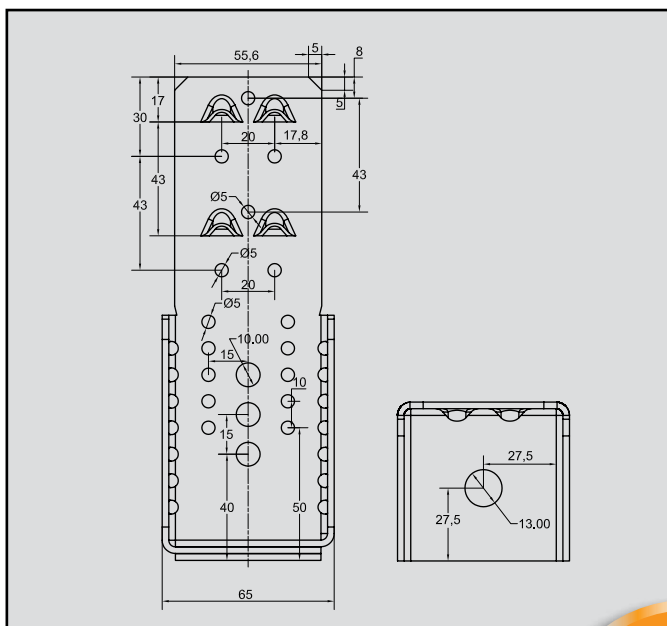
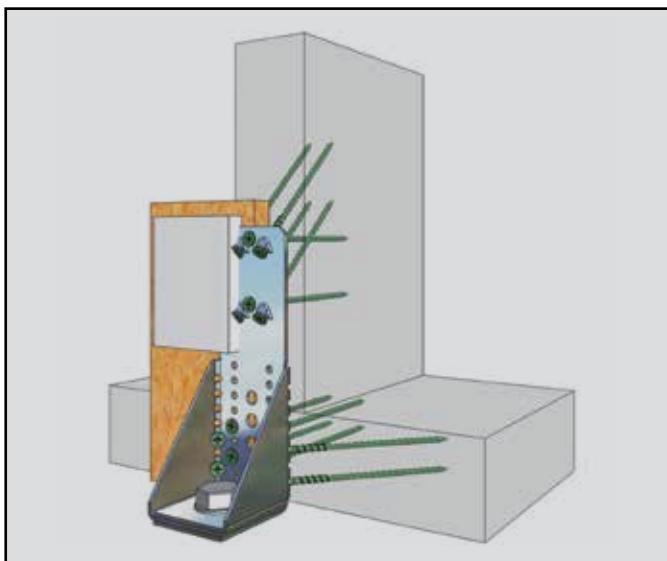
## The advantages

- 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 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

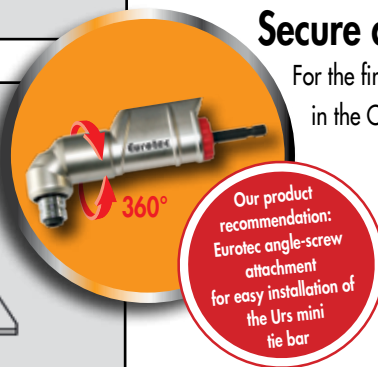
The forces are transferred directly into the Urs mini tie bar via the supplied screws without subjecting the screws to shearing. The compressive component resulting from resolution of the forces is dissipated via the OSB/Fermacell® panel.

## 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

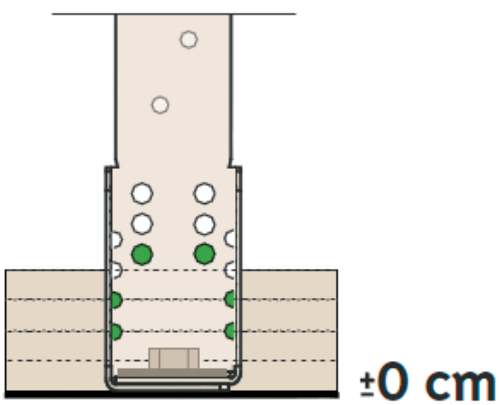
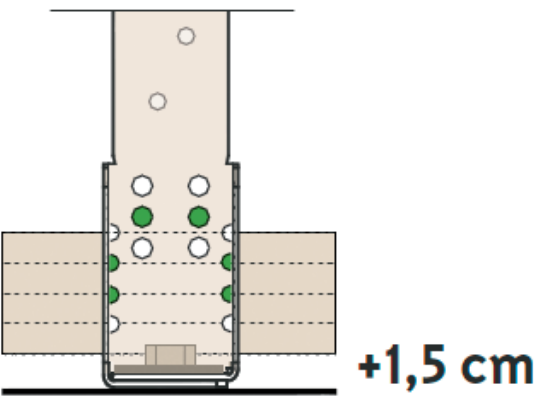
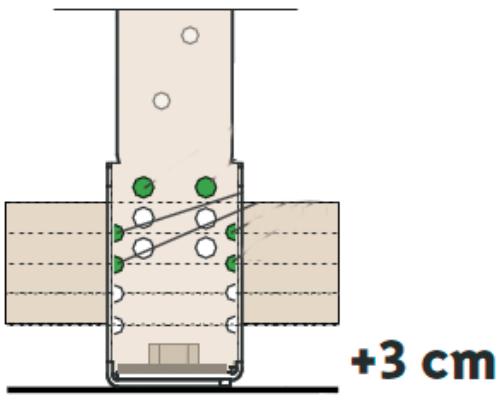
For the first time, an anchorage can also be used reliably in the OSB/Fermacell® butt joint without attenuation.



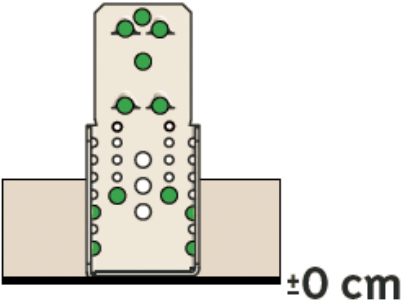
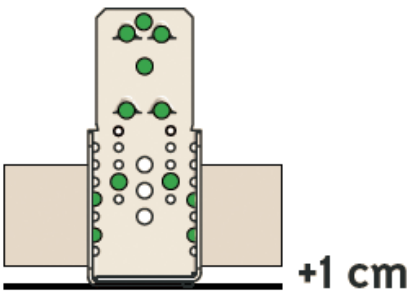
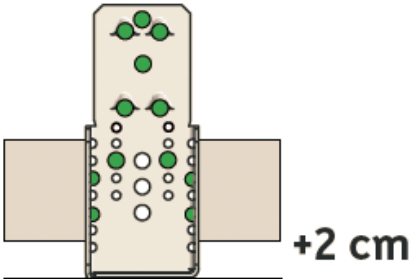
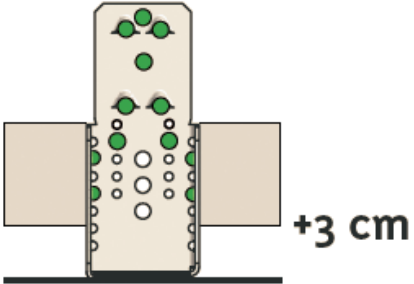
## Urs mini tie bar

|                                    | 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 / $R_{y,d} = 2,5 \text{ kN}$ |

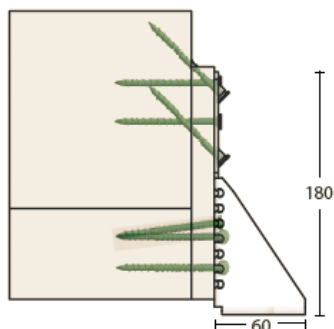
**Urs tie-bar  
assembly instructions**



**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



# Angle bracket

Hot-dip galvanised steel

## Angle bracket

with a rib



| Art. no. | Dimensions <sup>a)</sup> (mm) | Drill holes <sup>b)</sup> (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

