

Product data sheet – 340/440 Tension rods

Product description

The tension rods 340/440 are moulded sheet steel parts especially for timber frame construction for transfer of tensile forces. They enable quick and easy base point anchoring of wooden elements in wood, steel or concrete substrates. The tension rods are particularly sturdy and can withstand high stresses.

Material

- Galvanised S355 construction steel

Advantages

- Short root face (150 mm)
- Indirect fixing due to an intermediate layer (e.g. OSB)
- For installation in wood and concrete
- Optimised screw pattern for very high tensile capacities
- In combination with the pressure plate, the tensile force can also be increased



Approval



Product table

Art. no.	product name	Dimensions [mm]*	Material thickness [mm]	PU
954099	340 tension rod	340 x 63 x 60	3	1
954100	440 tension rod	440 x 63 x 60	3	1
954110	Tension rod pressure plate	50 x 58 x 10		1

* Height x depth x width

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Static values

340 tension rod															
Load direction F1 (with pressure plate)															
Wood/concrete	Fixing in the support						Fixing in uncracked concrete				Fixing in cracked concrete				Steel
	Connectors														
	Anchor nails			ABS			Rock concrete screw		Bolt anchor		Rock concrete screw		Bolt anchor		
Dimensions [mm]	4 x 40	4 x 50	4 x 60	5 x 40	5 x 50	5 x 60	ø 12,5	ø 16,5	ø 12	ø 16	ø 12,5	ø 16,5	ø 12	ø 16	S355
Number [n]	25			25			1		1		1		1		
Char. tensile capacity [kN]	28,3	33,4	34,4	38,8	41,3	44	25	40	20	35	12	30	20	35	47,9

The load-bearing capacities were determined based on ETA-19/0020

Characteristic load-bearing capacity in kN,

wood strength class 350 kg/m³ char. Gross density.

The minimum distances between the connectors and the edges according to EC5 must be complied with

440 tension rod															
Load direction F1 (with pressure plate)															
Wood/concrete	Fixing in the support						Fixing in uncracked concrete				Fixing in cracked concrete				Steel
	Connectors														
	Anchor nails			ABS			Rock concrete screw		Bolt anchor		Rock concrete screw		Bolt anchor		
Dimensions [mm]	4 x 40	4 x 50	4 x 60	5 x 40	5 x 50	5 x 60	ø 12,5	ø 16,5	ø 12	ø 16	ø 12,5	ø 16,5	ø 12	ø 16	S355
Number [n]	34						1		1		1		1		
Char. tensile capacity [kN]	37,3	44	45,4	51,1	54,5	58	25	40	20	35	12	30	20	35	47,9

The load-bearing capacities were determined based on ETA-19/0020

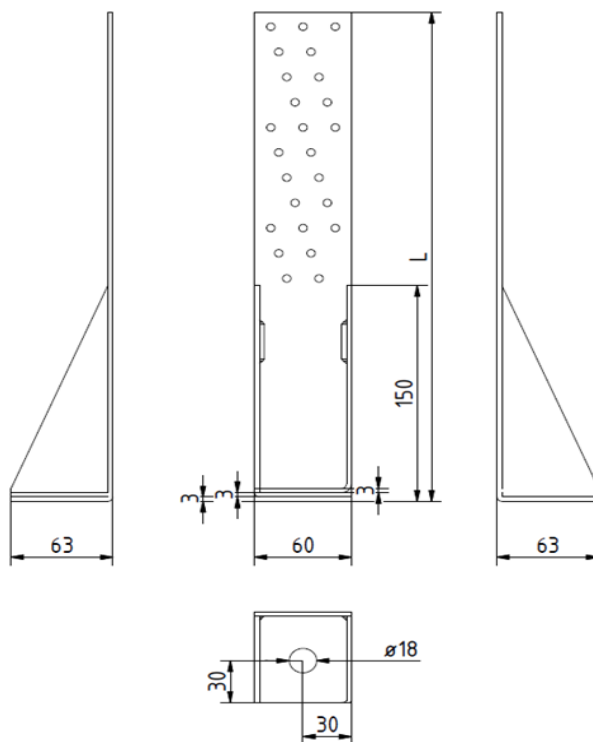
Characteristic load-bearing capacity in kN,

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Drawing



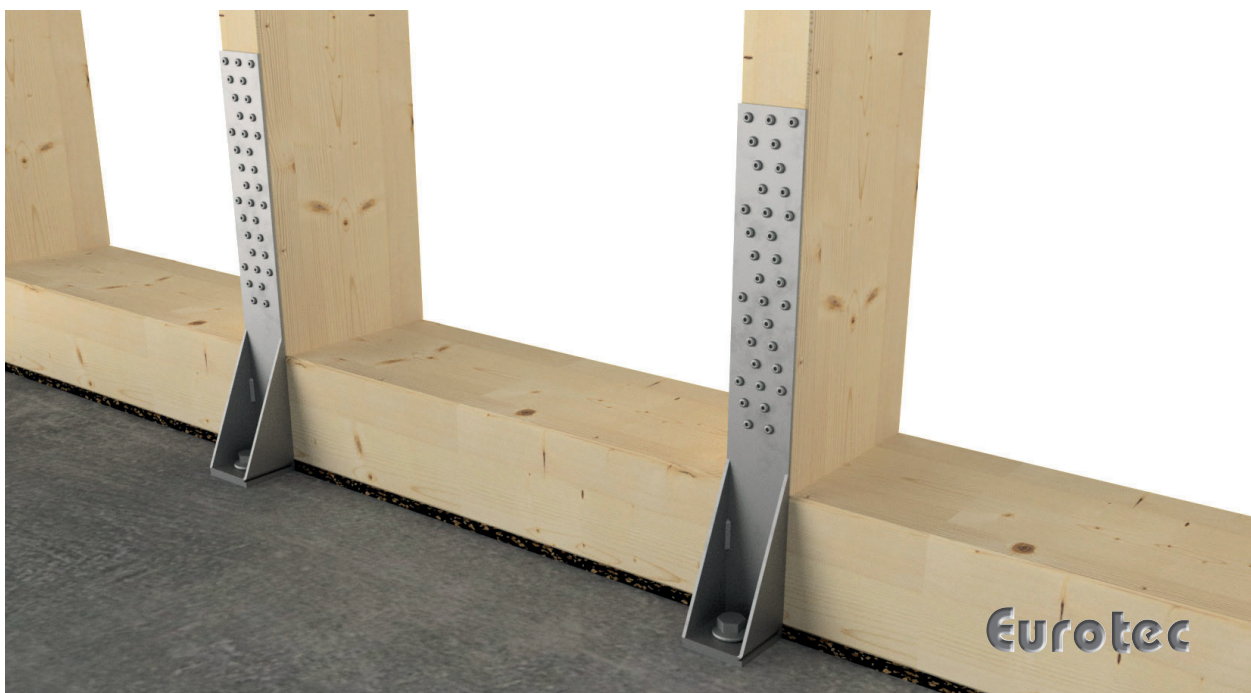
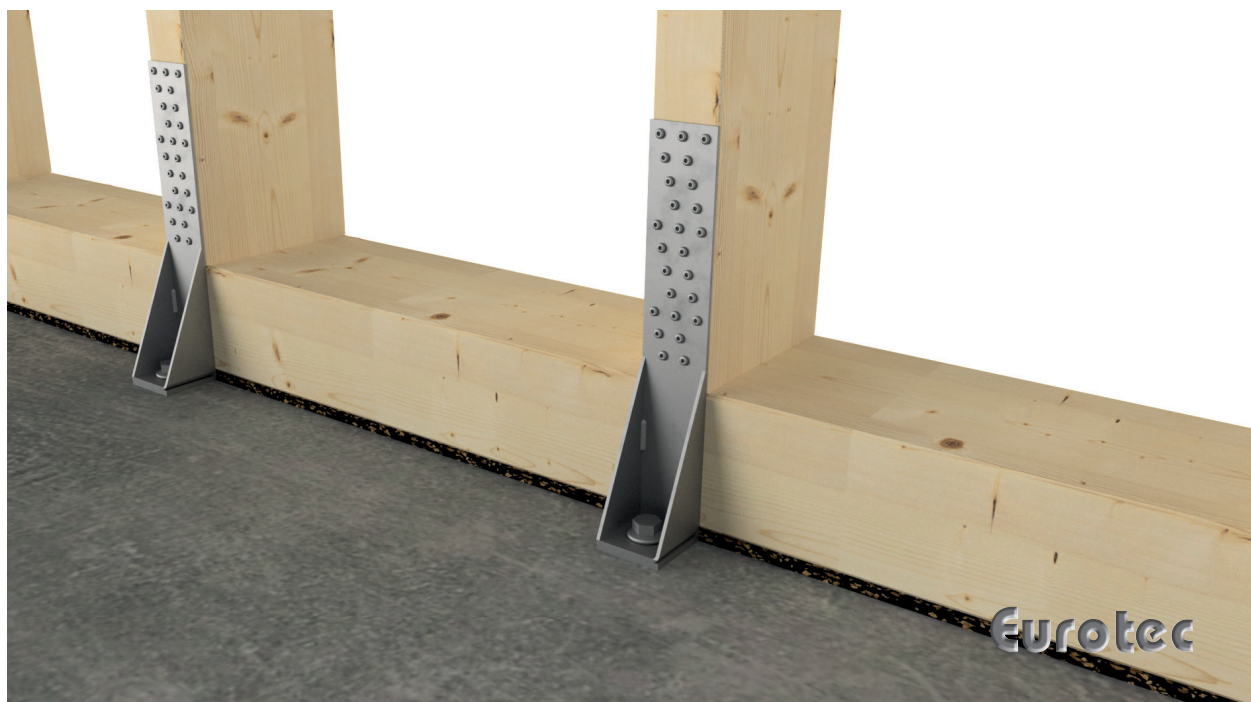
Instructions for use

The tension rods are placed on the planking in the floor area and fastened to the stem and, if necessary, to the sole plate with screws or anchor nails. In this regard, the connection can safely transfer tensile, suction and shearing forces into the tension rod via the screws and finally into the base plates via a dowel.

Maximum sole plate height: 150 mm taking the distances to the edge of the end-grained wood into account according to EC5

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Application pictures



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).