

Product data sheet – Tension rod HighLoad

Product description

The tension rod HighLoad is a steel-plate shaped part especially designed for transmitting very high tensile forces in timber construction. It was developed to meet the requirements of modern timber buildings (complex hall buildings, multi-storey buildings, and so on). It is able to handle exceptionally high loads.

Material

- Galvanised S355 construction steel
- Material thickness: 3 mm

Advantages

- Short root face (150 mm)
- Ideal for anchoring cross-laminated timber elements (CLT)
- Indirect fixing due to an intermediate layer (e. g. OSB)
- For installation in concrete, wood and steel
- Optimised screw pattern and geometry for very high tensile capacities



Approval



Product table

Tension rod HighLoad			
Art. no.	Name	Dimensions [mm] ^{a)}	PU
954114	Tension rod HighLoad	750 x 140 x 85	1
954178	Pressure plate HighLoad	130 x 82 x 40	1

a) Height x length x width

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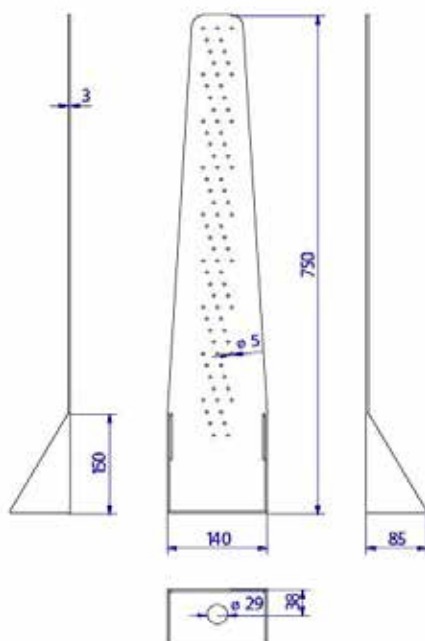
Static values

Load direction F1									
Timber/Concrete	Fixing in the support						Fixing in uncracked concrete		Steel
	Joining devices						Anchor rod (injection)	Bolt anchor	
	Anchor nails			Angle-bracket screw					
Dimensions [mm]	4 x 40	4 x 50	4 x 60	5 x 40	5 x 50	5 x 60	Ø 27	Ø 27	S355
Quantity [n]	81			81			1	1	
Char. tensile capacity [kN]	81,4	96,04	99,1	111,7	119	126,8	-	-	104,3

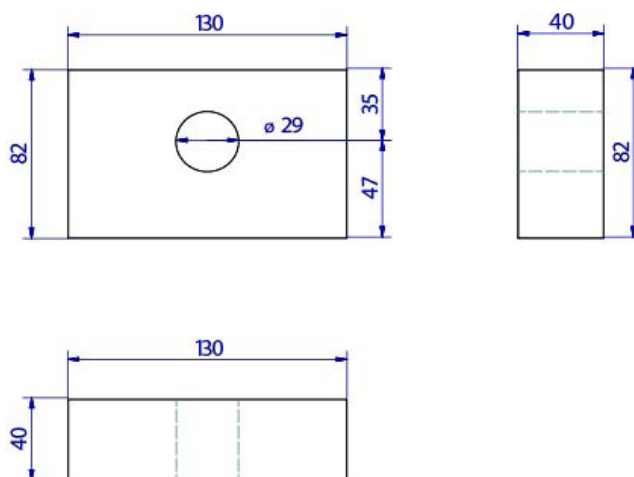
Wood strength class 350 kg/m³ char. Gross density.

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

Drawings



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Instructions for use

The tension rods are positioned on the planking in the floor area to mark the drill hole. The tension rod is then put aside to drill and clean the hole, and finally the tension rod is glued in using injection mortar. Now the tension rod incl. pressure plate can be positioned and fastened to the stem or wooden element with WBS screws or anchor nails. Finally, the nut is screwed onto the anchor rod using the relevant torque. 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.

Edge and centre distances according to EC5 as well as the curing time and tightening torque of the concrete anchor must be observed.

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Application images



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).