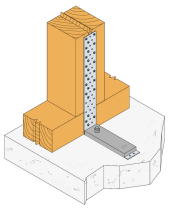
Technical Sheet

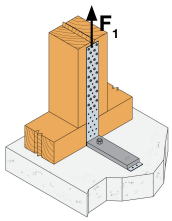
HD
Tension tie HD

HD tension anchors are used for the connection of wooden components for particular design. HD tension rods are made bent in an angle of about 2-3 mm thick, galvanized perforated sheet. The horizontal leg of the connecting rods are screw holes for M12, M16 and M20 and is used for attachment into the concrete. Galvanized back plate thicknesses from 15 to 20 mm absorbs pulling power from the vertical feet in concrete anchors.









Features

Material

Steel quality:

Angle: S 250 GD + Z 275 according to DIN EN 10346

Pedestal: S 235 JR according to DIN EN 10025

Corrosion protection:

Angle: 275 g / m galvanized on both sides 20mm

base:
galvanizing layer thickness of about 55 microns in accordance with DIN EN 1461

Benefits

- **Depending on the load, you can choose different sizes of the tie rod.**

Applications

Applicatons

Concrete, steel, wood, wood products.

Scope

- **The connection element wooden structure can be optimally combined with concrete bottom plates, such as the ever more frequently occurring timber frame construction.**
- **Using a specially developed lining plate ensures optimal utilization of permissible load anchors.**

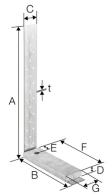
E = distance from the wall opening

Technical Sheet

HD
Tension tie HD

Technical Data

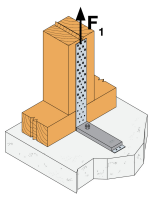
Product Dimensions



Reference	Connector Dimensions														
	Other				Product Dimensions[mm]							Joist	Flange B		
	Tun / DB nr.	NOB nr.	Qty per Box	Weight[kg]	A[mm]	B[mm]	C[mm]	d[mm]	E[mm]	G[mm]	t[mm]	Round	Round		
												Ø5[mm]	Ø14[mm]	Ø18[mm]	Ø22[mm]
HD340M12G	5804535	23382724	10.0	1.3	342	182	40	15	27	50	2	24	1	-	-
HD400M16G	5804536	23382732	10.0	1.2	403	123	40	15	28	60	3	29	-	1	-
HD420M16G	5804537	23382740	8.0	2.4	422	222	60	20	37	60	2	50	-	1	-
HD420M20G	5804538	23382757	10.0	1.2	422	102	60	20	37	60	2	50	-	-	1

E = Drilling distance from the wall

Capacities



Reference	Holdowns capacity				
	Product capacities - Timber to Concrete				
	Number of Fasteners			Capacities[kN]	
	Joist	Flange B		$R_{1,k}$	Bolt factor
	Qty	Qty	Type		
HD340M12G	n	1.0	M12	min. (n x Rlat.k; 17,8/kmod)	1.2
HD400M16G	n	1.0	M16	min. (n x Rlat.k; 23,4/kmod)	1.3
HD420M16G	n	1.0	M16	min. (n x Rlat.k; 26,8/kmod)	1.2
HD420M20G	n	1.0	M20	min. (n x Rlat.k; 26,8/kmod)	1.8

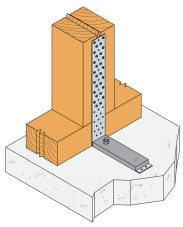
n = n_{ef} acc. to EC5 (8.3.1.1)
$R_{lat,k}$ = characteristic capacity of the connecting means in the vertical tongue on shearing

The bolt must be checked for a load of $F_{1,d}$ x "Bolt factor".

Installation

Fasteners

- Fastening to the post is done with CNA4.0xℓ threaded nails or CSA5,0xℓ screws.
- Anchor bolts must be used for connection to concrete components.



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