Technical data sheet

HTT - HOLD DOWN

Ideal for existing or new construction, HTT Tension ties provide a high strength timber to concrete, or timber to masonry, tension connection

ETA-07/0285, UK-DoP-e07/0285

FEATURES

CL.2 INDOOR Z275

Material

Z275 Pre-galvanised mild steel.

Benefits

- Enables a connection to concrete structure.

APPLICATIONS

Connections

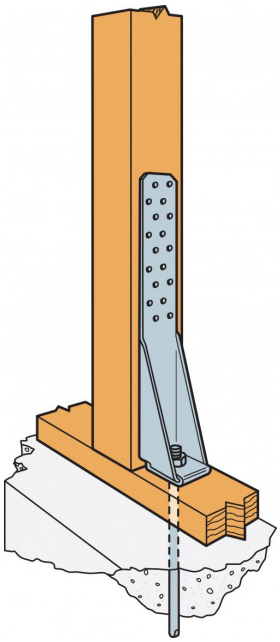
Timber Members

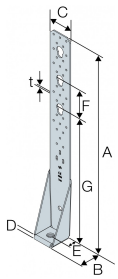
When to Use

- Timber structures which exerted to high uplift forces can be connected to concrete structures with the HTT Hold Down.
- Tension force connection between timber floor joists and masonry walls

TECHNICAL DATA

Product Dimensions





References	Product Dimensions [mm]								Joist [mm]			Holes flange B [mm]		
	A	B	C	D	E	F	G	t	Ø4,7	Ø5	Ø21	Ø17,5	Ø18	#26
HTT5	404	62	64	11.4	33	-	-	2.8	26	-	-	1	-	-
HTT22E	558	60	63	12.5	33	80	352	3	-	31	3	-	1	-

Product capacities - simplified values

References	Product capacities - Timber to Concrete								
	Number of Fasteners				Characteristic capacities - Timber C24 to concrete [kN]				
	Joist		Flange B		$R_{1,k}$ (without US50/50/8 washer)				
	Qty	Type	Qty	Type	CNA4.0x40	CNA4.0x50	CNA4.0x60	CSA5.0x40	CSA5.0x50
HTT5	18	CNA/CSA	1	M16	18.6	24.7	31	32.6	-
HTT22E	26	CNA/CSA	1	M16	39.6	42.3	52.3	50.6	52.3

Simplified numerical characteristic capacities values are based on load duration and service class assumption (Instantaneous, Service class 2, k_{mod} = 1.1). For other load duration, service class and fasteners, please refer to ETA-07/0285.
For HTT31, 4 CSA5.0x50 must always be installed on the bottom extremity of the oblong holes to reach the capacities given in the table. For other fasteners in these holes, the calculation shall be calculated according to ETA.

INSTALLATION

Fixing

Fastening into Timber Stud:

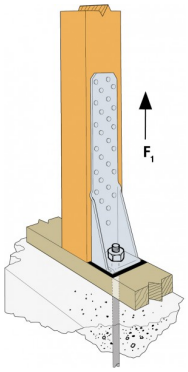
- 4mm CNA Nails
- 5mm CSA Screws

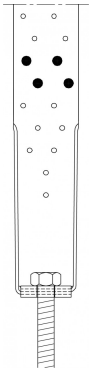
Fastening to the concrete:

- Mechanical anchors: M16 WA Anchor or BOAX-II
- Chemical anchors: injection mortar SET-XP or AT-HP + M16 threaded rod LMAS

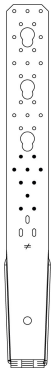
Installation

- The connector is mounted with a suitable M16 bolt to the concrete or masonry wall, and the vertical leg is fastened with 4mm CNA Nails, or 5.0mm CSA Screws, to the timber.

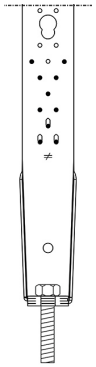




For HTT5 these holes must always be filled.



For HTT22E these holes must always be filled



HTT22E Nail pattern