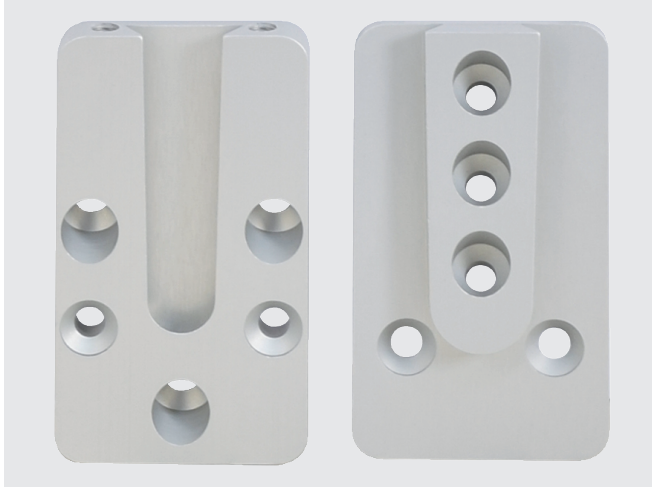


HVP 88107 with uplift protection



Application

Concealed beam connector for wood-wood connections.

Product Specifications

Dimensions w x h x d	40 x 70 x 12
Number of screws	10
Screw size	ø 4.5 x 50 – 80
Minimum timber section with screw ø 5 x 60 (mm) header	60 x 80
Joist	50 x 80
Characteristic load capacity* ø 5 x 60	7.32
ø 5 x 100	11.46
Carton quantity	10
CE	*

* F_{2,Rk} (kN) for GL24h with fully threaded screws: ø 4.5 x 50 with effective thread length of 45 mm and ø 4.5 x 80 with effective thread length of 74 mm. For other screws and thread lengths or wood based materials: cf. design manual.

Product Description

Main and secondary beam connection wood to wood

Main and secondary beam connection wood to wood with PITZL HVP 88107.1000 according to ETA-15/0187. The connection to secondary beam with 5 SFS HT (Heco) screws with a diameter of 4.5 mm and a length of 50/60/80 mm. Connection to main beam with 5 SFS HT (Heco) screws with a diameter of 4.5 mm and a length of 50/60/80 mm. The lift-off protection with 2 pcs. SFS HT cylinder head screws with a diameter of 5.0 mm and a length of 20 mm is required. A transverse tension lock is/is not to be provided in the area of the main/secondary beam. The main beam is/is not torsional fixed or sufficiently held. The serviceability has to be proven by the stiffness characteristics. A fire resistance time of 60 minutes is to be solved by appropriate design measures.

The characteristic load bearing capacity according to timber strength class C24 are:

F_{1,Rk} = 6.01 / 7.23 / 9.59 kN – Force acting in direction of the secondary beam
 F_{2,Rk} = 6.65 / 8.00 / 10.62 kN – Force acting in direction of insertion
 F_{3,Rk} = 6.26 kN – Force acting against direction of insertion
 F_{4,Rk} = 6.26 kN – Force acting perpendicular to direction of insertion
 M_{tor,J,Rk} = 75.09 kN – Rotation moment in the axis of the secondary beam

The characteristic load bearing capacity according to timber strength class GL24h are:

F_{1,Rk} = 6.49 / 7.80 / 10.35 kN – Force acting in direction of the secondary beam
 F_{2,Rk} = 7.18 / 8.63 / 11.46 kN – Force acting in direction of insertion
 F_{3,Rk} = 6.56 kN – Force acting against direction of insertion
 F_{4,Rk} = 6.56 kN – Force acting perpendicular to direction of insertion
 M_{tor,J,Rk} = 78.76 kN – Rotation moment in the axis of the secondary beam

The number and arrangement of the connectors as well as the installation and assembly must be taken from the specifications in accordance with ETA-15/0187. Basically, the requirements of DIN EN 1995 must be fulfilled.

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Static Values

Effective thread length (l_{ef})		Minimal section (mm)		Characteristic load capacity R_k (KN)							
				Solid wood C24 ($\rho_k = 350 \text{ kg/m}^3$)				Glued-laminated timber GL24h ($\rho_k = 385 \text{ kg/m}^3$)			
Screws	l_{ef} (mm)	H	J	$F_{2,RK}$	$F_{3,RK}$	$F_{4,RK}$	$F_{1,RK}$	$F_{2,RK}$	$F_{3,RK}$	$F_{4,RK}$	$F_{1,RK}$
$\varnothing 4.5 \times 50$	44	60 x 80	60 x 80	6.79	6.26	6.26	6.13	7.25	6.52	6.52	6.55
$\varnothing 4.5 \times 60$	54	70 x 90	60 x 90	8.00			7.23	8.54			7.72
$\varnothing 4.5 \times 80$	74	90 x 110	60 x 110	10.62			9.59	11.34			10.25

(Erstellt)	(Datum)	(Werkstoff)	EN AW 6082	nach	(Maßstab)
Autret	19.03.2015	(Beschichtung)			
A	Bohr. Abheb. 22 mm	13.01.2015	Autret		
B	FREIBAGE	19.03.2015	Autret		
Ind.	Änderung	Datum	Name		
(Benennung)			HVP		
(Zeichnungsnummer / Artikel-Nr.)				88107.1000 Teil 1	
				Blatt /	

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Autret	19.03.2015	(Beschichtung)			
A	FREIGABE	19.03.2015	Autret		
Ind.	Änderung	Datum	Name		
(Benennung)			HVP		
(Zeichnungsnummer / Artikel-Nr.)				88107.1000 Teil 2	
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