GH - Angle bracket Type HS

ETA-13/0900

0769

Properties

Steel grade	S 250 GD / DX 51 D / 1.4571
Surface	Z 275 / Stainless steel

For angle bracket basic principles, see download document

Fasteners

Fixing in concrete, masonry, steel, …

Concrete screw, stud anchor, chemical anchor, screws and bolts to DIN 601 / ISO 4016

Fixing in timber with fasteners to ETA-13/0523

GH connector nails (threaded nails)	4.0 x 35 / 40 / 50 / 60 / 75 / 100 mm
GH screw	5.0 x 25 / 35 / 40 / 50 / 60 / 70 mm

The joint can also be made with an interlayer (e.g. OSB).

Nail pattern

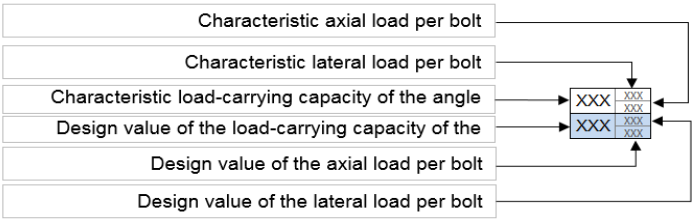
Full nailing / partial nailing, see technical drawing or ETA

Calculation of the design value of the load-carrying capacities to ETA-13/0900

The tables contain characteristic load-carrying capacities (resistances) and design values of the load-carrying capacity (resistance) "short-term" in kN

b	=	Purlin / joist width
e	=	Distance of the load application point from the bottom of the angle bracket

Key for design tables:



Remarks:
Timber strength class 350 kg/m³ char. density.
The fastener minimum edge distances to EC 5 shall be satisfied.
All calculations and values are exclusively for GH products and their fasteners.
The load-bearing capacities were determined on the basis of ETA 13/0523. It is not possible to transfer the values to third party makes.

Disclaimer:
Despite careful calculations and checking, no liability is accepted for the technical data.
Subject to change without notice

For technical drawing, see website www.holzverbinder.de

Angle bracket Type HS Art. No. 943 90 x 35 x 40 x 3.0 mm

Characteristic load-carrying capacity (resistance) and design value of the load-carrying capacity (resistance) ("short-term") in kN,

Load direction F_1 for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Column-concrete	1,2,3	8	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
Purlin-to-concrete	1,2,3	8	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2

Load direction $F_{2/3}$ for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Timber-to-concrete	1,2,3,4,5,6,7	8	char.	1,7	1,7	2,6	2,6	3,4	1,7	5,1	2,6
			short-term	1,2	1,2	1,8	1,8	2,3	1,2	3,6	1,8

Angle bracket Type HS Art. No. 944 110 x 35 x 40 x 3.0 mm

Characteristic load-carrying capacity (resistance) and design value of the load-carrying capacity (resistance) ("short-term") in kN,

Load direction F_1 for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Column-concrete	1,2,3,4,5	10	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
Purlin-to-concrete	1,2,3,4,5	10	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2

Load direction $F_{2/3}$ for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Timber-to-concrete	1,2,3,4, 5,6,7,8,9	10	char.	2,2	2,2	3,3	3,3	4,5	2,2	6,7	3,3
			short-term	1,5	1,5	2,3	2,3	3,1	1,5	4,6	2,3

Angle bracket Type HS Art. No. 945 130 x 35 x 40 x 3.0 mm

Characteristic load-carrying capacity (resistance) and design value of the load-carrying capacity (resistance) ("short-term") in kN,

Load direction F_1 for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Column-concrete	1,2,3,4,5,6,7	12	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
Purlin-to-concrete	1,2,3,4,5,6,7	12	char.	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2
			short-term	0,9	2,2	0,9	2,2	1,8	2,2	1,8	2,2

Load direction $F_{2/3}$ for one or two angle brackets

				1x angle brackets				2x angle brackets			
	Number of nail holes n_V	Number of nail holes n_H	LDC	Fasteners 4x40		Fasteners 4x60		Fasteners 4x40		Fasteners 4x60	
Timber-to-concrete	1,2,3,4,5,6, 7,8,9,10,11	12	char.	2,8	2,8	4,1	4,1	5,5	2,8	8,2	4,1
			short-term	1,9	1,9	2,8	2,8	3,8	1,9	5,7	2,8