



„Innovationen im Holzbau“

GH integral connector, 4-rows



Fig. by way of example

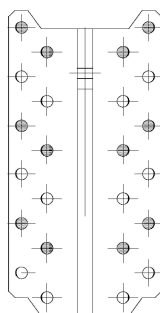


Fig. by way of example
Partial nailing/column joint



ETA 10/0009

Structural values

Type	Secondary member		SD	Nail	4.0x60	k _{mod} =0.6/permanent		k _{mod} =0.8/medium-term		k _{mod} =0.9/short-term		charact.	
	B ≥	H ≥				n _J Ø12	Figure	n _H	Compression	Tension	Compression	Tension	Compression
						F _{Z,D,Rd}	F _{Z,Z,Rd}	F _{Z,D,Rd}	F _{Z,Z,Rd}	F _{Z,D,Rd}	F _{Z,Z,Rd}	FZ _{D,Rk}	FZ _{U,Rk}
0-4	60	108	2	Full	16	4,24	2,46	5,66	3,26	6,37	3,67	9,0	5,3
	60	108	2	Partial	8	3,16	0,73	4,21	0,97	4,74	1,09	6,7	1,6
	80	108	2	Full	16	4,48	2,46	5,91	3,26	6,62	3,67	9,3	5,3
	80	108	2	Partial	8	4,26	0,73	5,04	0,97	5,37	1,09	6,9	1,6
	100	108	2	Full	16	4,48	2,46	5,91	3,26	6,62	3,67	9,4	5,3
	100	108	2	Partial	8	4,26	0,73	5,22	0,97	5,63	1,09	7,4	1,6
	120	108	2	Full	16	4,48	2,46	5,91	3,26	6,62	3,67	9,4	5,3
I-4	60	144	3	Partial	8	4,26	0,73	5,49	0,97	6,01	1,09	8,1	1,6
	60	144	3	Full	24	7,75	6,56	10,33	8,75	11,63	9,85	16,4	13,9
	60	144	3	Partial	12	6,12	3,46	8,16	4,61	9,18	5,18	13,0	7,3
	80	144	3	Full	24	10,07	7,21	12,35	9,51	13,18	10,64	17,0	14,4
	80	144	3	Partial	12	8,07	4,74	9,76	5,51	10,41	5,87	13,4	7,6
	100	144	3	Full	24	10,07	7,21	12,82	9,51	13,80	10,64	18,2	15,2
	100	144	3	Partial	12	8,07	4,75	10,12	5,71	10,90	6,15	14,4	8,1
II-4	120	144	3	Full	24	10,07	7,21	13,14	9,51	14,64	10,64	19,8	15,2
	120	144	3	Partial	12	8,07	4,75	10,20	6,06	11,21	6,58	15,3	8,8
	60	180	4	Full	32	12,88	11,20	17,18	14,94	19,33	16,81	27,3	23,8
	60	180	4	Partial	16	9,13	6,12	12,18	8,16	13,70	9,18	19,4	13,0
	80	180	4	Full	32	15,88	12,73	20,54	16,65	21,90	18,56	28,2	24,5
	80	180	4	Partial	16	12,52	8,39	14,56	9,76	15,53	10,41	20,0	13,4
	100	180	4	Full	32	15,88	12,73	20,55	16,65	22,81	18,56	30,2	26,2
III-4	100	180	4	Partial	16	12,74	8,54	15,10	10,12	16,27	10,90	21,4	14,4
	120	180	4	Full	32	15,88	12,73	20,55	16,65	22,81	18,56	31,8	26,2
	120	180	4	Partial	16	13,24	8,88	16,02	10,74	17,39	11,65	23,3	15,6
	60	216	5	Full	40	18,76	17,13	25,01	22,84	28,14	25,70	39,8	36,3
	60	216	5	Partial	20	12,29	9,72	16,39	12,97	18,44	14,59	26,1	20,6
	80	216	5	Full	40	22,09	18,26	28,39	23,74	31,41	26,39	41,1	37,0
	80	216	5	Partial	20	16,85	13,33	19,59	15,50	20,90	16,53	26,9	21,3
IV-4	100	216	5	Full	40	22,09	18,26	28,39	23,74	31,41	26,39	43,5	37,0
	100	216	5	Partial	20	17,14	13,56	20,33	16,08	21,89	17,32	28,8	22,8
	120	216	5	Full	40	22,09	18,26	28,39	23,74	31,41	26,39	43,5	37,0
	120	216	5	Partial	20	17,82	14,10	21,56	17,06	23,40	18,51	31,4	24,8
	60	252	6	Full	48	23,74	22,06	31,66	29,42	35,62	33,10	50,3	46,8
	60	252	6	Partial	24	15,65	13,82	20,86	18,43	23,48	20,74	33,2	29,3
	80	252	6	Full	48	30,25	25,48	37,85	32,84	40,37	36,38	52,0	48,3
IV-4	80	252	6	Partial	24	21,45	18,94	24,94	22,03	26,60	23,50	34,3	30,3
	100	252	6	Full	48	30,25	25,48	38,47	32,84	42,29	36,38	55,7	50,5
	100	252	6	Partial	24	21,82	19,28	25,88	22,86	27,87	24,62	36,7	32,4
	120	252	6	Full	48	30,25	25,48	38,47	32,84	42,37	36,38	58,1	50,5
	120	252	6	Partial	24	22,69	19,38	27,45	23,96	29,79	26,09	40,0	34,9

Calculation of the load-bearing capacities of the fasteners to DIN 1052:2008-12.

Characteristic density of the members $r_k=350 \text{ kg/m}^3$.

Fixing onto the main member/the column by means of GH connector nails (threaded nails) 4.0x60.

Distance of nails from loaded edge, perpendicular to the grain $a_{2,t}$ or $a_{4,t} = 28 \text{ mm}$.

Dowel made of steel grade S235JR.

The moment resulting from the eccentricity must be carried by the main member.

Tension may have to be verified separately.

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