



Joist hangers are used for the connection of secondary beams to main beams or posts.



[ETA-06/0270](#), [UK-DoP-e06/0270](#)

FEATURES



Material

Pre-galvanised steel S250GD + Z275 according to EN 10346 (Thickness : 2mm)

Benefits

- The BSNN joist hangers are also approved for three-axle loads.
- Connections to concrete, steel and masonry are permissible, see static values.



APPLICATIONS

Header member

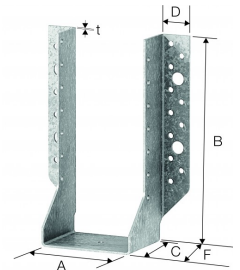
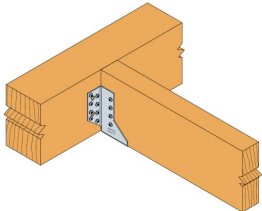
- **Header** : Solid sawn, SCL, Glulam, Steel, Concrete
- **Joist** : Solid sawn, SCL, Glulam

Intend Use

- Joist, purlin, beam
- Cladding plate, rafter
- Reinforcement of existing assemblies

TECHNICAL DATA

Product Dimensions



References	Joist Size [mm]				Product Dimensions [mm]							Header holes		Joist holes
	Width		Height		A	B	C	D	F	t	Ø5 [mm]	Ø11.5 [mm]	Ø5 [mm]	
	Min	Max.	Min	Max.										
BSNN36/142	34	36	152	213	36	142	60	27	63	2	16	2	10	
BSNN40/95	38	40	105	143	40	95	60	27	63	2	8	2	6	
BSNN40/110	38	40	120	165	40	110	60	27	63	2	12	2	6	
BSNN40/140	38	40	150	210	40	140	60	27	63	2	16	2	10	
BSNN45/93	43	45	102	139	45	92	60	27	63	2	8	2	6	
BSNN45/108	43	45	118	161	45	108	60	27	63	2	12	2	6	
BSNN45/138	43	45	148	206	45	138	60	27	63	2	16	2	10	
BSNN45/168	43	45	178	251	45	168	60	27	63	2	18	4	12	
BSNN45/198	43	45	208	296	45	198	60	27	63	2	22	4	14	
BSNN48/91	46	48	101	136	48	91	60	27	63	2	8	2	6	
BSNN48/136	46	48	146	204	48	136	60	27	63	2	16	2	10	
BSNN48/166	46	48	176	249	48	166	60	27	63	2	18	4	12	
BSNN48/226	46	48	236	339	48	226	60	27	63	2	26	4	16	
BSNN51/90	49	51	100	134	51	90	60	27	63	2	8	2	6	
BSNN51/105	49	51	114	157	51	104	60	27	63	2	12	2	6	
BSNN51/135	49	51	144	202	51	134	60	27	63	2	16	2	10	
BSNN51/164	49	51	174	247	51	164	60	27	63	2	18	4	12	
BSNN51/195	49	51	204	292	51	194	60	27	63	2	22	4	14	
BSNN60/100	58	60	110	150	60	100	60	27	63	2	12	2	6	
BSNN60/130	58	60	140	195	60	130	60	27	63	2	16	2	10	
BSNN60/160	58	60	170	240	60	160	60	27	63	2	18	4	12	
BSNN60/190	58	60	200	285	60	190	60	27	63	2	22	4	14	
BSNN60/220	58	60	230	330	60	220	60	27	63	2	26	4	16	
BSNN64/98	62	64	108	147	64	98	60	27	63	2	12	2	6	
BSNN64/128	62	64	138	192	64	128	60	27	63	2	16	2	10	
BSNN66/217	64	66	227	326	66	217	60	27	63	2	26	4	16	
BSNN70/125	68	70	135	188	70	125	60	27	63	2	16	2	10	
BSNN70/155	68	70	165	232	70	155	60	27	63	2	18	4	12	
BSNN73/124	71	73	134	185	73	124	60	27	63	2	16	2	10	
BSNN73/154	71	73	164	230	73	154	60	27	63	2	18	4	12	
BSNN73/184	71	73	194	275	73	184	60	27	63	2	22	4	14	
BSNN76/122	74	76	132	183	76	122	60	27	63	2	16	2	10	
BSNN76/152	74	76	162	228	76	152	60	27	63	2	18	4	12	
BSNN76/182	74	76	192	273	76	182	60	27	63	2	22	4	14	
BSNN80/120	78	80	130	180	80	120	60	27	63	2	16	2	10	
BSNN80/150	78	80	160	225	80	150	60	27	63	2	18	4	12	
BSNN80/180	78	80	190	270	80	180	60	27	63	2	22	4	14	
BSNN80/210	78	80	220	315	80	210	60	27	63	2	26	4	16	

References	Joist Size [mm]				Product Dimensions [mm]						Header holes		Joist holes
	Width		Height		A	B	C	D	F	t	Ø5 [mm]	Ø11.5 [mm]	Ø5 [mm]
	Min	Max.	Min	Max.									
BSNN90/145	88	90	155	218	90	145	60	27	63	2	18	4	12
BSNN90/205	88	90	215	308	90	205	60	27	63	2	26	4	16
BSNN98/141	96	98	151	212	98	141	60	27	63	2	18	4	12
BSNN100/110	98	100	120	165	100	110	60	27	63	2	16	2	10
BSNN100/140	98	100	150	210	100	140	60	27	63	2	18	4	12
BSNN100/170	98	100	180	255	100	170	60	27	63	2	22	4	14
BSNN100/200	98	100	210	300	100	200	60	27	63	2	26	4	16
BSNN115/163	113	115	172	244	115	162	60	27	63	2	22	4	14
BSNN115/193	113	115	202	289	115	192	60	27	63	2	26	4	16
BSNN120/160	118	120	170	240	120	160	60	27	63	2	22	4	14
BSNN120/190	118	120	200	285	120	190	60	27	63	2	26	4	16
BSNN140/150	138	140	160	225	140	150	60	27	63	2	22	4	13
BSNN140/180	138	140	190	270	140	180	60	27	63	2	26	4	15

Product capacities - Timber to timber - full nailing

References	Characteristic capacities - Timber to timber - Full nailing																	
	Number of Fasteners		Product characteristic capacities - Timber C24 [kN]															
	Header	Joist	R _{1,k}				R _{2,k}				R _{3,k}				R _{4,k}			
	Qty	Qty	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60
BSNN36/142	16	10	17.7	-	-	-	5.4	-	-	-	6.7	-	-	-	6.1	-	-	-
BSNN40/95	8	6	7.6	8.9	-	-	4.3	4.3	-	-	3.4	3.9	-	-	3.7	4.4	-	-
BSNN40/110	12	6	11.8	13.8	-	-	5.1	5.1	-	-	4.8	5.5	-	-	4.9	5.9	-	-
BSNN40/140	16	10	17.5	20.3	-	-	5.9	5.9	-	-	6.7	7.7	-	-	6.1	7.4	-	-
BSNN45/93	8	6	7.2	8.4	-	-	4.7	4.7	-	-	3.4	3.9	-	-	3.7	4.4	-	-
BSNN45/108	12	6	11.4	13.4	-	-	5.7	5.7	-	-	4.8	5.5	-	-	4.9	5.9	-	-
BSNN45/138	16	10	17.1	19.9	-	-	6.6	6.6	-	-	6.7	7.7	-	-	6.1	7.4	-	-
BSNN45/168	18	12	22.1	25.4	-	-	7.4	7.4	-	-	7.8	9	-	-	7.3	8.9	-	-
BSNN45/198	22	14	26.6	29.3	-	-	8.2	8.2	-	-	9.2	10.6	-	-	8.5	10.4	-	-
BSNN48/91	8	6	7.1	8.4	-	-	5	5	-	-	3.4	3.9	-	-	3.7	4.4	-	-
BSNN48/136	16	10	16.9	19.7	-	-	7	7	-	-	6.7	7.7	-	-	6.1	7.4	-	-
BSNN48/166	18	12	21.9	25.2	-	-	7.9	7.9	-	-	7.8	9	-	-	7.3	8.9	-	-
BSNN48/226	26	16	29.9	32.9	-	-	9.4	9.4	-	-	10.5	12.1	-	-	9.8	11.8	-	-
BSNN51/90	8	6	6.9	8.2	10.5	-	5.2	5.2	5.2	-	3.4	3.9	5	-	3.7	4.4	5.9	-
BSNN51/105	12	6	11	12.9	16.6	-	6.3	6.3	6.3	-	4.8	5.5	6.9	-	4.9	5.9	7.8	-
BSNN51/135	16	10	16.7	19.4	24.7	-	7.4	7.4	7.4	-	6.7	7.7	9.7	-	6.1	7.4	9.8	-
BSNN51/164	18	12	21.7	25	31.1	-	8.3	8.3	8.3	-	7.8	9	11.4	-	7.3	8.9	11.8	-
BSNN51/195	22	14	26.6	29.3	35.5	-	9.2	9.2	9.2	-	9.2	10.6	13.5	-	8.5	10.4	13.7	-
BSNN60/100	12	6	10.3	12.1	15.6	18.4	7.2	7.2	7.2	7.2	4.8	5.5	6.9	7.9	4.9	5.9	7.8	9.8
BSNN60/130	16	10	16	18.7	23.8	27.6	8.5	8.5	8.5	8.5	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN60/160	18	12	21.2	24.4	30.8	33	9.7	9.7	9.7	9.7	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN60/190	22	14	26.6	29.3	35.5	37.8	10.7	10.7	10.7	10.7	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN60/220	26	16	29.9	32.9	40	42.5	11.6	11.6	11.6	11.6	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN64/98	12	6	10	11.8	15.2	18	7.6	7.6	7.6	7.6	4.8	5.5	6.9	7.9	4.9	5.9	7.8	9.8
BSNN64/128	16	10	15.7	18.3	23.4	27.2	9	9	9	9	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN66/217	26	16	29.9	32.9	40	42.5	12.7	12.7	12.7	12.7	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN70/125	16	10	15.2	17.8	22.8	26.5	9.7	9.7	9.7	9.7	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN70/155	18	12	20.5	23.7	30	33	11.1	11.1	11.1	11.1	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN73/124	16	10	14.9	17.5	22.4	26.2	10.1	10.1	10.1	10.1	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN73/154	18	12	20.3	23.5	29.7	33	11.5	11.5	11.5	11.5	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN73/184	22	14	26.6	29.3	35.5	37.8	12.7	12.7	12.7	12.7	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN76/122	16	10	14.7	17.2	22.1	25.8	10.4	10.4	10.4	10.4	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN76/152	18	12	20.1	23.3	29.5	33	11.9	11.9	11.9	11.9	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN76/182	22	14	26.6	29.3	35.5	37.8	13.2	13.2	13.2	13.2	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN80/120	16	10	14.3	16.8	21.6	25.3	10.8	10.8	10.8	10.8	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3

References	Characteristic capacities - Timber to timber - Full nailing																	
	Number of Fasteners		Product characteristic capacities - Timber C24 [kN]															
	Header	Joist	R _{1,k}				R _{2,k}				R _{3,k}				R _{4,k}			
	Qty	Qty	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60
BSNN80/150	18	12	19.8	23	29.1	33	12.4	12.4	12.4	12.4	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN80/180	22	14	26.4	29.3	35.5	37.8	13.8	13.8	13.8	13.8	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN80/210	26	16	29.9	32.9	40	42.5	15.1	15.1	15.1	15.1	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN90/145	18	12	19	22.2	28.2	32.3	13.7	13.7	13.7	13.7	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN90/205	26	16	29.9	32.9	40	42.5	16.7	16.7	16.7	16.7	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN98/141	18	12	18.4	21.5	27.3	31.5	14.6	14.6	14.6	14.6	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN100/110	16	10	12.4	14.7	19	22.6	12.8	12.8	12.8	12.8	6.7	7.7	9.7	11.3	6.1	7.4	9.8	12.3
BSNN100/140	18	12	18.2	21.3	27.1	31.3	14.9	14.9	14.9	14.9	7.8	9	11.4	13.2	7.3	8.9	11.8	14.8
BSNN100/170	22	14	24.9	28.9	35.5	37.8	16.7	16.7	16.7	16.7	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN100/200	26	16	29.9	32.9	40	42.5	18.3	18.3	18.3	18.3	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN115/163	22	14	23.7	27.5	34.9	37.8	18.7	18.7	18.7	18.7	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN115/193	26	16	29.9	32.9	40	42.5	20.6	20.6	20.6	20.6	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN120/160	22	14	23.2	27.1	34.4	37.8	19.3	19.3	19.3	19.3	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN120/190	26	16	29.9	32.9	40	42.5	21.4	21.4	21.4	21.4	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7
BSNN140/150	22	14	21.4	25	32	37.1	21.7	21.7	21.7	21.7	9.2	10.6	13.5	15.6	8.5	10.4	13.7	17.2
BSNN140/180	26	16	29	32.9	40	42.5	24.1	24.1	24.1	24.1	10.5	12.1	15.4	17.9	9.8	11.8	15.7	19.7

Combined load:

$$\sqrt{\sum \left(\frac{F_{i,d}}{R_{i,d}} \right)^2} \leq 1$$

Product capacities - Timber to timber - Partial nailing

References	Capacities - Timber to timber - Partial nailing																	
	Number of Fasteners		Product characteristic capacities - Timber C24 [kN]															
	Header	Joist	R _{1,k}				R _{2,k}				R _{3,k}				R _{4,k}			
	Qty	Qty	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60	CNA 4.0x35	CNA 4.0x40	CNA 4.0x50	CNA 4.0x60
BSNN36/142	10	6	11.9	-	-	-	5.4	-	-	-	2.4	-	-	-	6.1	-	-	-
BSNN40/95	6	3	6.6	7.7	-	-	3.8	4.3	-	-	1.3	1.4	-	-	2.8	3.1	-	-
BSNN40/110	8	4	8.5	9.9	-	-	5.1	5.1	-	-	2	2.2	-	-	4.9	5.9	-	-
BSNN40/140	10	6	11.7	13.5	-	-	5.9	5.9	-	-	2.4	2.7	-	-	6.1	7.4	-	-
BSNN45/93	6	3	6.4	7.4	-	-	3.8	4.5	-	-	1.3	1.4	-	-	2.8	3.1	-	-
BSNN45/108	8	4	8.3	9.7	-	-	5.7	5.7	-	-	2	2.2	-	-	4.9	5.9	-	-
BSNN45/138	10	6	11.5	13.3	-	-	6.6	6.6	-	-	2.4	2.7	-	-	6.1	7.4	-	-
BSNN45/168	12	6	13.3	14.6	-	-	7.4	7.4	-	-	2.9	3.2	-	-	7.3	8.9	-	-
BSNN45/198	14	8	16.6	18.3	-	-	8.2	8.2	-	-	3.3	3.6	-	-	8.5	10.4	-	-
BSNN48/91	6	3	6.3	7.4	-	-	3.8	4.5	-	-	1.3	1.4	-	-	2.8	3.1	-	-
BSNN48/136	10	6	11.4	13.2	-	-	7	7	-	-	2.4	2.7	-	-	6.1	7.4	-	-
BSNN48/166	12	6	13.3	14.6	-	-	7.9	7.9	-	-	2.9	3.2	-	-	7.3	8.9	-	-
BSNN48/226	16	8	16.6	18.3	-	-	9.4	9.4	-	-	3.7	4.1	-	-	9.8	11.8	-	-
BSNN51/90	6	3	6.2	7.2	9.2	-	3.8	4.5	5.2	-	1.3	1.4	1.7	-	2.8	3.1	3.8	-
BSNN51/105	8	4	8	9.4	12	-	5.9	6.3	6.3	-	2	2.2	2.7	-	4.9	5.9	7.5	-
BSNN51/135	10	6	11.3	13.1	16.5	-	7.4	7.4	7.4	-	2.4	2.7	3.3	-	6.1	7.4	9.8	-
BSNN51/164	12	6	13.3	14.6	17.8	-	8.3	8.3	8.3	-	2.9	3.2	3.8	-	7.3	8.9	11.3	-
BSNN51/195	14	8	16.6	18.3	22.2	-	9.2	9.2	9.2	-	3.3	3.6	4.4	-	8.5	10.4	13.7	-
BSNN60/100	8	4	7.6	8.9	11.4	13.3	5.9	7	7.2	7.2	2	2.2	2.7	2.9	4.9	5.9	7.5	8
BSNN60/130	10	6	10.9	12.6	16	18.3	8.3	8.5	8.5	8.5	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN60/160	12	6	13.3	14.6	17.8	18.9	9.7	9.7	9.7	9.7	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN60/190	14	8	16.6	18.3	22.2	23.6	10.7	10.7	10.7	10.7	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN60/220	16	8	16.6	18.3	22.2	23.6	11.6	11.6	11.6	11.6	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN64/98	8	4	7.4	8.7	11.1	13	5.9	7	7.6	7.6	2	2.2	2.7	2.9	4.9	5.9	7.5	8
BSNN64/128	10	6	10.7	12.4	15.7	18.1	8.3	9	9	9	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12

Capacities - Timber to timber - Partial nailing

References	Number of Fasteners		Product characteristic capacities - Timber C24 [kN]															
	Header	Joist	R _{1,k}				R _{2,k}				R _{3,k}				R _{4,k}			
	Qty	Qty	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA	CNA
			4.0x35	4.0x40	4.0x50	4.0x60	4.0x35	4.0x40	4.0x50	4.0x60	4.0x35	4.0x40	4.0x50	4.0x60	4.0x35	4.0x40	4.0x50	4.0x60
BSNN66/217	16	8	16.6	18.3	22.2	23.6	12.7	12.7	12.7	12.7	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN70/125	10	6	10.4	12.1	15.4	17.7	8.3	9.7	9.7	9.7	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN70/155	12	6	13.3	14.6	17.8	18.9	10	11	11.1	11.1	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN73/124	10	6	10.2	12	15.2	17.5	8.3	9.8	10.1	10.1	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN73/154	12	6	13.3	14.6	17.8	18.9	10	11	11.5	11.5	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN73/184	14	8	16.6	18.3	22.2	23.6	12.7	12.7	12.7	12.7	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN76/122	10	6	10.1	11.8	15	17.3	8.3	9.8	10.4	10.4	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN76/152	12	6	13.3	14.6	17.8	18.9	10	11	11.9	11.9	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN76/182	14	8	16.6	18.3	22.2	23.6	13.2	13.2	13.2	13.2	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN80/120	10	6	9.9	11.5	14.7	17.1	8.3	9.8	10.8	10.8	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN80/150	12	6	13.3	14.6	17.8	18.9	10	11	12.4	12.4	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN80/180	14	8	16.6	18.3	22.2	23.6	13.3	13.8	13.8	13.8	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN80/210	16	8	16.6	18.3	22.2	23.6	13.3	14.6	15.1	15.1	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN90/145	12	6	13.2	14.6	17.8	18.9	10	11	13.3	13.7	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN90/205	16	8	16.6	18.3	22.2	23.6	13.3	14.6	16.7	16.7	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN98/141	12	6	12.7	14.6	17.8	18.9	10	11	13.3	14.2	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN100/110	10	6	11.6	13.4	17	18.9	8.3	9.8	12.7	12.8	2.4	2.7	3.3	3.5	6.1	7.4	9.8	12
BSNN100/140	12	6	12.6	14.6	17.8	18.9	10	11	13.3	14.2	2.9	3.2	3.8	4.1	7.3	8.9	11.3	12
BSNN100/170	14	8	16.6	18.3	22.2	23.6	13.3	14.6	16.7	16.7	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN100/200	16	8	16.6	18.3	22.2	23.6	13.3	14.6	17.8	18.3	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN115/163	14	8	15.8	18.3	22.2	23.6	13.3	14.6	17.8	18.7	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN115/193	16	8	16.6	18.3	22.2	23.6	13.3	14.6	17.8	18.9	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN120/160	14	8	15.6	18.1	22.2	23.6	13.3	14.6	17.8	18.9	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN120/190	16	8	16.6	18.3	22.2	23.6	13.3	14.6	17.8	18.9	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16
BSNN140/150	14	8	14.4	16.8	21.4	23.6	13.3	14.6	17.8	18.9	3.3	3.6	4.4	4.7	8.5	10.4	13.7	16
BSNN140/180	16	8	16.6	18.3	22.2	23.6	13.3	14.6	17.8	18.9	3.7	4.1	4.9	5.2	9.8	11.8	15.1	16

Combined load:

$$\sqrt{\sum \left(\frac{F_{i,d}}{R_{i,d}} \right)^2} \leq 1$$

INSTALLATION

Fasteners

Joist:

- Connector nails CNA Ø4.0x50
- Connector nails CNA Ø4.0x35 for thickness less than 64mm
- Connector screws CSA Ø5.0x40
- Connector screws CSA Ø5.0x35 for thickness less than 60mm

Header:

Timber header:

- Connector nails CNA Ø4.0x50
- Connector nails CNA Ø4.0x35 for thickness less than 64mm
- Connector screws CSA Ø5.0x40
- Connector screws CSA Ø5.0x35 for thickness less than 60mm

Steel Header:

- Bolt Ø10mm

The difference between diameter of the hole and the bolt can't be more than 2mm

Concrete Header:

- Mechanical Anchor: Throughbolt WA M10/78/5
- Chemical Anchor: AT-HP with LMAS M10/10

