



Vinkelbeslag V1

Angle connectors V1

Winkelverbinder V1

DK

Anvendelse: Vinkelbeslag V1 anvendes til samling af krydsende bjælker, til forankring og som konsol samt forbindelse mellem træ og beton.

Beslagene: Er udført i 2,5 mm varmforzinket stålplade forsynet med Ø5 mm huller for 4 mm NKT beslagkamsøm eller 5 mm NKT beslagskruer. Yderligere er der Ø11 mm huller for 10 mm bolte/franske skruer.

Montering: I krydssamling (fig. 1) anvendes 4-6 søm i lodret flig og 4-9 søm i vandret flig. Minimum sømantal: 4 pr. flig anbragt i yderpositioner (hjørnerne). Anvend altid beslaget således, at de 4 huller nær beslagets bukkelinie placeres i den nederste bjælke (se fig. 1). I beton, eller hvor man i øvrigt ønsker at anvende bolthuller i beslaget, skal beslaget vendes således, at de 2 bolthuller nærmest beslagets bukkelinie fastgøres på nederste bjælke.

UK

Application: Angle connectors V1 are used for joining of cross beams, for anchoring, and as bracket as well as connection between wood and concrete.

Connectors: Made in 2.5 mm hot galvanized steel plate provided with diam. 5 mm holes for 4 mm NKT anchor nails or 5 mm NKT connector screws. Further, there are diam. 11 mm holes for 10 mm bolts/coach screws.

Fitting: In cross joint (fig. 1) use 4-6 nails in vertical flange and 4-9 nails in horizontal flange. Minimum number of nails: 4 per flange placed in outer positions (corners). Always use the connector so that the four holes near the connector bending line are placed in the lower beam (see fig. 1). In concrete, or wherever bolt holes are required to be used in the connector, the connector should face so that the 2 bolt holes next to the connector bending line are fastened on the lower beam.

D

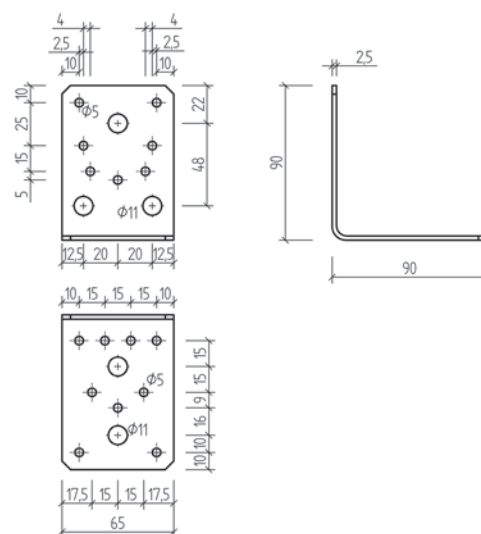
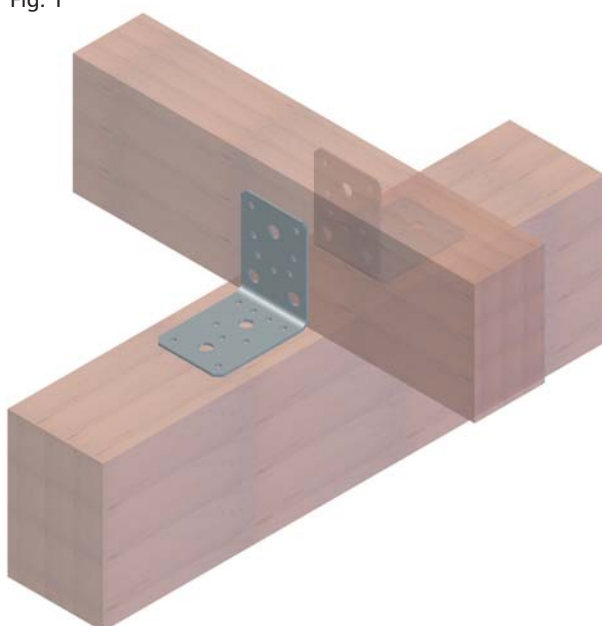
Anwendung: Winkelverbinder V1 sind zum Verbinden von kreuzenden Balken, zur Verankerung und als Konsolen sowie bei Verbindungen von Holz und Beton einzusetzen.

Ausführung: Die Winkelverbinder sind aus 2,5 mm feuerverzinkter Stahlplatte gefertigt und mit Ø5 mm Löchern für 4 mm NKT Ankernägeln oder 5 mm NKT Beslagschrauben ausgerüstet. Ausserdem sind Ø11 mm Löcher für 10 mm Bolzen/Kopfschrauben vorhanden.

Montage: In den Kreuzverbindungen (Figur 1) sind 4-6 Nägel in den senkrechten Schenkel und 4-9 Nägel in den waagrechten Schenkel einzusetzen. Mindestnagelzahl: 4 pro Schenkel, in Aussenposition angebracht (den Ecken). Setzen Sie die Winkelverbinder immer so ein, dass die 4 Löcher in der Nähe der Biegelinie des Winkelverbinders am untersten Balken angebracht werden (siehe Figur 1). In Beton, oder wo man sonst Bolzenlöcher im Winkelverbinder anwenden möchte, ist der Winkelverbinder so zu drehen, dass die beiden Bolzenlöcher, die dicht an der Biegelinie des Winkelverbinders liegen, am unteren Balken befestigt werden.

SIMA art. no.	Type	Dimension H	L	t	B	Ø mm Ø5 mm	Ø11 mm	Weight gram	Pcs. Box / Pallet
210779	V1	90	90	2,5	65	16	5	219	50 / 4000 CE

Fig. 1



Sima
a strong connection

A 3D perspective diagram of a mechanical assembly. It consists of two main rectangular blocks. The front block has a smaller rectangular piece attached to its top surface. The back block has a similar piece attached to its top surface. A vertical force F_1 acts upwards on the top surface of the front block. A horizontal force F_2 acts to the left on the left side of the front block. A horizontal force F_3 acts to the right on the right side of the back block. A horizontal force F_4 acts to the left on the bottom surface of the front block. A horizontal force F_5 acts to the right on the top surface of the back block. Dimension b is indicated as the width of the front block. Dimension e is indicated as the width of the back block.

A diagram of a 90-degree corner. The vertical leg has a dimension of 90, and the horizontal leg has a dimension of 90. The corner is defined by two parallel lines, with a dimension of 2.5 indicating the distance from the corner to the start of the horizontal leg.

Technical calculations 2.1

Angle connector V1



Anchor nail 4,0 x 40	Number of nails	Load-duration class	F _{1d} [kN]	F _{2d} = F _{3d} [kN]	F _{4d} = F _{5d} [kN]	Maximum [kN]
1, 2, 3, 4, 5, 6 / 8, 9, 10, 11, 12, 13, 14, 15, 16	30 nails	Char.	7,31	11,34	$1,08 * ((0,78 * (29,6 + b)) / e)$	21,69
		P-load	3,25	5,04	$0,48 * ((0,78 * (29,6 + b)) / e)$	9,64
		L-load	3,80	5,89	$0,56 * ((0,78 * (29,6 + b)) / e)$	11,25
		M-load	4,34	6,73	$0,64 * ((0,78 * (29,6 + b)) / e)$	12,86
		S-load	4,88	7,57	$0,72 * ((0,78 * (29,6 + b)) / e)$	14,46
		I-load	5,97	9,25	$0,88 * ((0,78 * (29,6 + b)) / e)$	17,68

Anchor nail 4,0 x 60	Number of nails	Load-duration class	F _{1d} [kN]	F _{2d} = F _{3d} [kN]	F _{4d} = F _{5d} [kN]	Maximum [kN]
1, 2, 3, 4 / 8, 11, 15, 16	16 nails	Char.	6,80	7,91	$1,08 * ((1,45 * (15,9 + b)) / e)$	9,64
		P-load	3,02	3,52	$0,48 * ((1,45 * (15,9 + b)) / e)$	4,29
		L-load	3,53	4,10	$0,56 * ((1,45 * (15,9 + b)) / e)$	5,00
		M-load	4,03	4,69	$0,64 * ((1,45 * (15,9 + b)) / e)$	5,72
		S-load	4,54	5,28	$0,72 * ((1,45 * (15,9 + b)) / e)$	6,43
		I-load	5,54	6,45	$0,88 * ((1,45 * (15,9 + b)) / e)$	7,86

Anchor nail 4,0 x 60	Number of nails	Load-duration class	F _{1d} [kN]	F _{2d} = F _{3d} [kN]	F _{4d} = F _{5d} [kN]	Maximum [kN]
1, 2, 3, 4 / 8, 9, 10, 11, 15, 16	20 nails	Char.	9,01	7,91	$1,08 * ((1,45 * (15,9 + b)) / e)$	14,46
		P-load	4,01	3,52	$0,48 * ((1,45 * (15,9 + b)) / e)$	6,43
		L-load	4,68	4,10	$0,56 * ((1,45 * (15,9 + b)) / e)$	7,50
		M-load	5,34	4,69	$0,64 * ((1,45 * (15,9 + b)) / e)$	8,58
		S-load	6,01	5,28	$0,72 * ((1,45 * (15,9 + b)) / e)$	9,65
		I-load	7,35	6,45	$0,88 * ((1,45 * (15,9 + b)) / e)$	11,79

Anchor nail 4,0 x 60	Number of nails	Load-duration class	F _{1d} [kN]	F _{2d} = F _{3d} [kN]	F _{4d} = F _{5d} [kN]	Maximum [kN]
1, 2, 3, 4, 5, 6 / 8, 9, 10, 11, 12, 13, 14, 15, 16	30 nails	Char.	12,20	11,34	$1,08 * ((1,45 * (15,9 + b)) / e)$	21,69
		P-load	5,42	5,04	$0,48 * ((1,45 * (15,9 + b)) / e)$	9,64
		L-load	6,33	5,89	$0,56 * ((1,45 * (15,9 + b)) / e)$	11,25
		M-load	7,23	6,73	$0,64 * ((1,45 * (15,9 + b)) / e)$	12,86
		S-load	8,14	7,57	$0,72 * ((1,45 * (15,9 + b)) / e)$	14,46
		I-load	9,94	9,25	$0,88 * ((1,45 * (15,9 + b)) / e)$	17,68