



Die AE Winkelverbinder werden u. a. für Holz / Holz Anschlüsse oder zur Befestigung von Holzkonstruktionen an Beton, Stahl oder Mauerwerk verwendet.



[DE-DoP-e06/0106](#), [FR-DoP-e06/0106](#), [ETA-06/0106](#)

EIGENSCHAFTEN



Material

Stahlqualität:

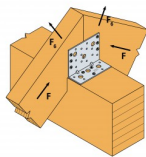
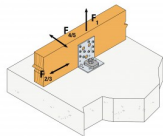
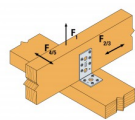
- S 250 GD +Z 275 gemäß DIN EN 10346

Korrosionsschutz:

- 275 g/m2 beidseitig - entsprechend einer Zinkschichtdicke von ca. 20 µm

Vorteile

- Anschlussmöglichkeit an Holz und Beton
- Lasten in alle Richtungen aufnehmbar



ANWENDUNG

Anwendbare Materialien

Auflager:

- Holz, Holzwerkstoffe, Beton, Stahl

Aufzulagerndes Bauteil:

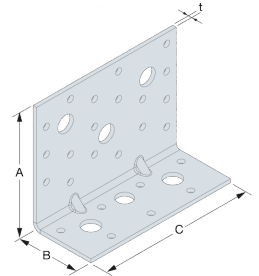
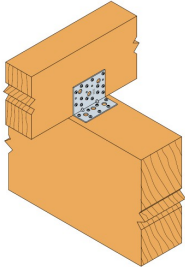
- Holz, Holzwerkstoffe

Anwendungsbereich

- Anschlüsse von Bauteilen aus Holz oder Holzwerkstoffen an Bauteile aus Holz/Holzwerkstoffen oder Beton/Stahl

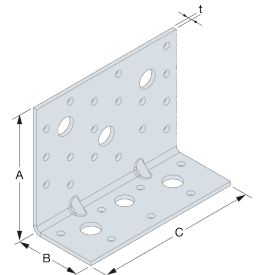
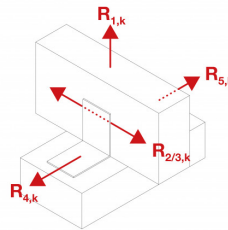
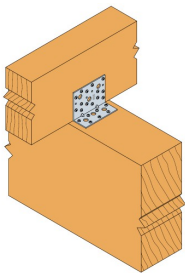
TECHNISCHE DATEN

Abmessungen



Artikel	Abmessungen [mm]				Schenkel A		Schenkel B	
	A	B	C	t	Ø5	Ø13	Ø5	Ø13
AE48	90	48	48	3	7	2	4	1
AE76	90	48	76	3	12	3	7	1
AE116	90	48	116	3	18	3	7	3

Tragfähigkeiten - Balken an Balken - Vollausnagelung



Artikel	Tragfähigkeiten - Balken an Balken - Vollausnagelung					
	Charakteristische Tragfähigkeit C24 - 2 Winkelverbinder je Anschluss [kN]					
	R _{1,k}		R _{2,k} = R _{3,k}		R _{4,k} = R _{5,k}	
	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60
AE48	2.9	4.9	4	6	1.3/kmod ^{0.25}	2.0/kmod ^{0.25}
AE76	5.8	9.8	11.6	15.6	2.9/kmod ^{0.25}	4.2/kmod ^{0.25}
AE116	5.8	9.8	16.6	23.2	3.2/kmod ^{0.25}	4.7/kmod ^{0.25}

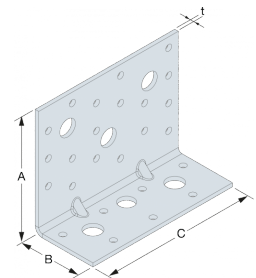
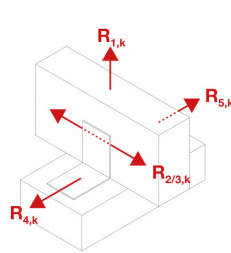
1) R_{4/5} is determined for beam width b = 75 mm and eccentricity e = 130 mm.

The load capacity belongs to a load group with the modification factor k_{mod}.

If the overall structure prevents the rotation of the purlin, the load values R_{1,k} and R_{2/3,k} in an assembly with only one bracket equal to half of the given value in the table

* For higher F_{2/F3} capacities, Load combination and other nail patterns, refer to ETA-06/0106

Tragfähigkeiten - Balken an Balken - Teilausnagelung



Artikel	Tragfähigkeiten - Balken an Balken - Teilausnagelung							
	Verbindungsmittel		Charakteristische Tragfähigkeit C24 - 2 Winkelverbinder je Anschluss [kN]					
	Schenkel A	Schenkel B	R _{1,k}		R _{2,k} = R _{3,k}		R _{4,k} = R _{5,k}	
	Anzahl	Anzahl	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60
AE48	4	4	2.9	4.9	3.9	5.4	1.3/kmod ^{0.25}	2.0/kmod ^{0.25}
AE76	7	7	5.8	9.8	9.5	13.1	2.9/kmod ^{0.25}	4.2/kmod ^{0.25}
AE116	8	7	5.8	9.8	13.8	19.4	3.2/kmod ^{0.25}	4.7/kmod ^{0.25}

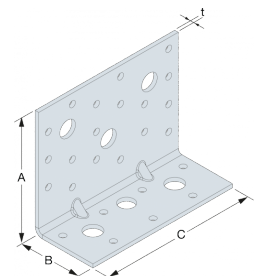
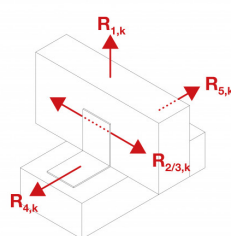
1) R_{4/5} is determined for beam width b = 75 mm and eccentricity e = 130 mm.

The load capacity belongs to a load group with the modification factor k_{mod}.

If the overall structure prevents the rotation of the purlin, the load values R_{1,k} and R_{2/3,k} in an assembly with only one bracket equal to half of the given value in the table

* For higher F_{2/F3} capacities, Load combination and other nail patterns, refer to ETA-06/0106

Charakter. Tragfähigkeit - Holz an Beton



Artikel	Tragfähigkeiten - Balken an Beton									
	Verbindungsmittel				Charakteristische Tragfähigkeit C24 - 2 Winkelverbinder je Anschluss [kN]					
	Schenkel A		Schenkel B		R _{1,k}		R _{2,k} = R _{3,k}		R _{4,k} = R _{5,k}	
	Anzahl	Typ	Anzahl	Typ	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60	CNA4.0x40	CNA4.0x60
AE48	6	CNA*	1	M12	min: 14.9 ; 12.6/kmod	12.6/kmod	2.1	3.5	min: 4.9 ; 4.2/kmod	min: 5.0 ; 4.9/kmod
AE76	9	CNA*	1	M12	min: 22.7 ; 16.8/kmod	16.8/kmod	7.5	11.2	3.5/kmod ^{0.25}	5.2/kmod ^{0.25}
AE116	12	CNA*	2	M12	25.1	min: 38.1 ; 28.1/kmod	25.8	27.7	10.1/kmod ^{0.25}	min: 15.7 ; 11.5/kmod

1) R_{4/5} is determined for beam width b = 75 mm and eccentricity e = 130 mm.

The load capacity belongs to a load group with the modification factor k_{mod}. The characteristic anchoring strength of the bolt must be minimum 15,3 kN for both withdrawal and shear force. The bearing capacity value for the assembly must be reduced proportionally if the bearing capacities of the bolt is less than 15,3 kN.

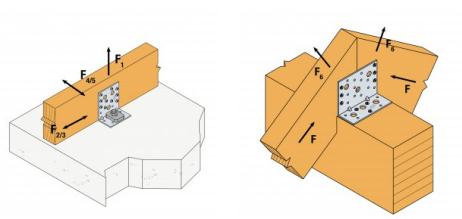
If the overall structure prevents the rotation of the purlin, the load values $R_{1,k}$ and $R_{2/3,k}$ in an assembly with only one bracket equal to half of the given value in the table

*For higher $F_{2/F3}$ capacities, Load combination and other nail patterns, refer to ETA-06/0106

INSTALLATION

Befestigung

- Die Befestigung erfolgt mit CNA4,0x ℓ Kammnägeln oder CSA5,0x ℓ Schrauben.
- Zur Befestigung auf Beton können ein bis zwei M12 Ankerbolzen mit U-Scheibe 40 x 40 x 10 mm verwendet werden.



TECHNICAL NOTES