Technical Sheet

AE
Reinforced Angle Bracket

These angles are used for connections wood / timber, or for connecting wooden structures in concrete, steel, masonry.



Features

Material

Steel quality:
• S250GD + Z275 according to DIN EN10346

Corrosion protection:
• 275 g / m galvanized on both sides 20mm

Benefits

• Connection wood / concrete
• Load in all directions 4

Applications

Applicable materials

Wood, wood products, concrete, steel

Application area

• Coupling elements of wood or wooden materials, components made of wood / wood materials or concrete / steel

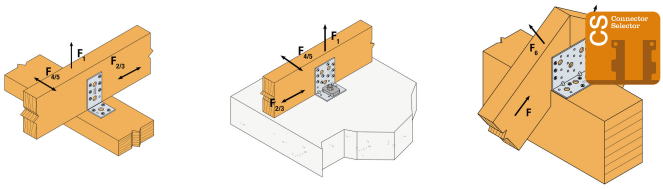
Values for joint wood and wood, two connection / partial nailing

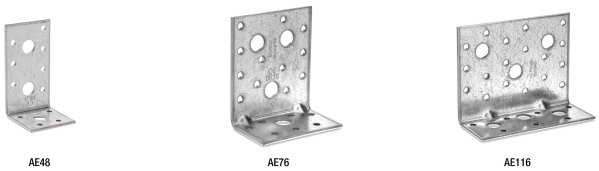
1) b = 80 and e = 120

***) The number of nails AE116: 8 pieces in F1, F4 / 5 and 9 pieces in the F2 / 3 - Other nails found in ETA.**

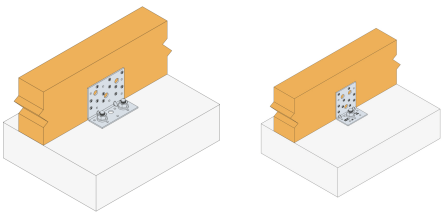
If the timber when the connection cannot twist, half of the values in the table can be adopted for connection with only one angle for R1 and R2 / 3 system.

If the purlins rotatable directions and forces F4 and F5 at other intervals, B and E, you can find more information on ETA.





AE48 AE76 AE116

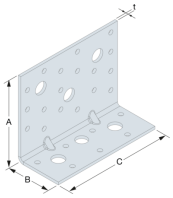


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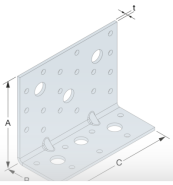
Technical Data

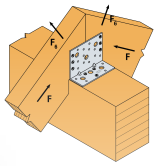
Product Dimensions



Reference	Connector Dimensions											
	Other				Product Dimensions[mm]				Joist[mm]		Flange B[mm]	
	Tun / DB nr.	NOB nr.	Qty per Box	Weight[kg]	A[mm]	B[mm]	C[mm]	Thickness[mm]	Round		Round	
									Ø5[mm]	Ø13	Ø5[mm]	Ø13[mm]
AE48	3779212	21220751	100.0	0.13	90	48	48	3	7	2	4	1
AE76	-	21594528	100.0	0.21	90	48	76	3	12	3	7	1
AE116	7742216	21594536	50.0	0.34	90	48	116	3	18	3	7	3

Capacities wood-wood connection - Full Nailing

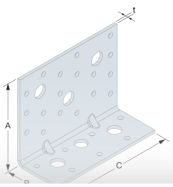


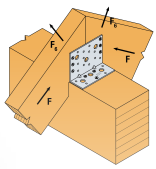


Capacities wood-wood connection - Full Nailing
See full table online ➡️

Reference	Number of Fasteners		ling									
	Joist	Flang B	full nailing[kN]									
	Qty	Qty	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x

Capacities wood-wood connection / partialnailing



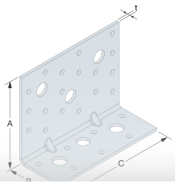


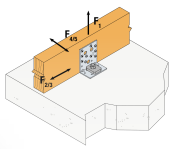
Capacities wood-wood connection / partialnailing
See full table online ➡️

Reference	Number of Fasteners		full nailing[kN]									
	Joist	Flang B										R4
	Qty	Qty	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x

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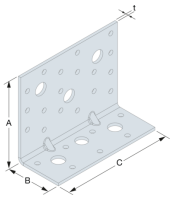


Characteristic capacities - Timber to concrete

Characteristic capacities - Timber to concrete
See full table online ➡️

Reference	Number of Joist													
	Qty	Type											- full nailing[kN]	
													CNA4.0x35	CNA4.
AE48	6	CNA*	1	M12	min: 12.3 ; 12.6/kmod	min: 14.9 ; 12.6/kmod	12.6/kmod	12.6/kmod	1.9	2.1	3.2	3.5	-	min: 4.2/km

Product capacities - CLT Beam to CLT beam - ∅12 connector screws - 2 angle brackets

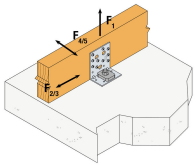
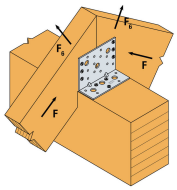
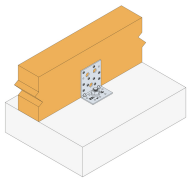
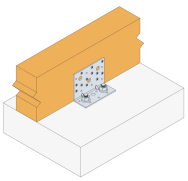
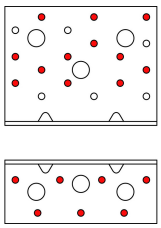
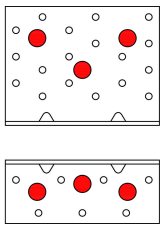
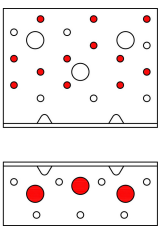


Reference	Angle bracket capacity					
	Product capacities - CLT beam to CLT beam - Ø12 connector screws - 2 angle brackets					
	Characteristic capacities - Timber CLT- 2 angle brackets per connection[kN]		Number of Fasteners			
	$R_{1,k}$	$R_{2,k}=R_{3,k}$	Joist		Flange B	
	SSH12x80	SSH12x80	Qty	Type	Qty	Type
AE48	-	-	-	-	-	-
AE116	33	29.5	3.0	SSH	3.0	SSH

Installation

Installation

- Timber to timber:
  - CNA4,0xℓ nails or CSA5,0xℓ screws for fastening in wood.
- Timber to concrete :
  - One or two M12 bolts with washer US40/40/10G for fastening.
- CLT beam to CLT beam :
  - SSH Ø 12.0 x 80 mm (for AE116)

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