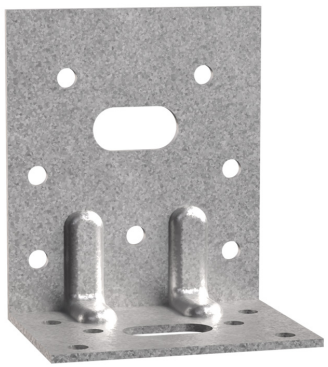
Technical Sheet

ER
Reinforced Angle Bracket

Reinforced angle brackets are suitable for structural applications in framing and wood-frame houses.



Features

Materiál

Kvalita oceli:
S 250 GD+Z 275 dle norem DIN EN
Ochrana proti korozi:
275 g/m pozinkováno z obou stran cca 20mm

Applications

Anwendbare Materialien

- **Supporting member:** solid wood, glued-laminated wood, concrete, steel, etc.
- **Supported member:** solid wood, composite lumber, glued-laminated wood, triangular trusses, profiles, etc.

Anwendungsbereich

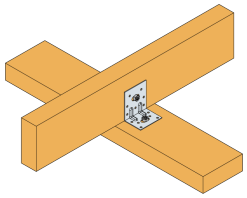
- Befestigungen von Holzbalken, Holzstützen an Pfetten oder Haupträger

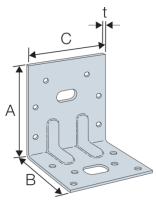
Technical Sheet

ER
Reinforced Angle Bracket

Technical Data

Product Dimensions

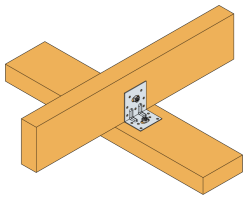


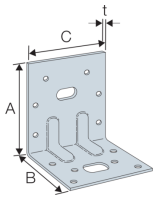


Reference	konektor rozměry								
	rozměry výrobku[mm]				nosník[mm]		příruba B[mm]		ostatní
	A[mm]	B[mm]	C[mm]	tloušťka[mm]	kulatý		kulatý	oválný	hmotnost[kg]
					Ø5[mm]	n	Ø5[mm]	Ø12x20	
E4/2.5	102.5	62.5	75	2.5	8	1	6	1	0.22

*angle bracket folded at 135°

Product characteristic capacities - Timber beam to timber beam - full nailing - assembly with 2 angle brackets

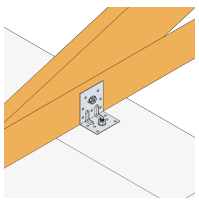


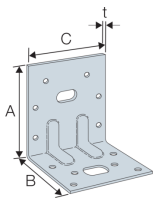


Reference	úhelník únosnost									
	výrobek capacities - dřevo to dřevo - Beam to beam - Full nailing									
	počet of Fasteners		charakteristická únosnost - 2 angle brackets per connection - full nailing[kN]							
	nosník	příruba B	$R_{1,k}$				$R_{2,k}=R_{3,k}$[kN]			
	množství	množství	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x40	CNA4.0x50	CNA4.0x60
E4/2.5	8	6	5.5	6.3	7.2	7.6	7.6	8.3	10.1	10.7

To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

Product characteristic capacities - Timber beam to rigid support - assembly with 2 angle brackets





Reference	úhelník únosnost									
	výrobek capacities - dřevo to beton									
	počet of Fasteners				charakteristická únosnost - 2 angle brackets per connection - full nailing[kN]					
	nosník		příruba B		$R_{1,k}$			$R_{2,k}=R_{3,k}$		
	množství	typ	množství	typ	CNA4.0x40	CNA4.0x50	CNA4.0x60	CNA4.0x40	CNA4.0x50	CNA4.0x60
E4/2.5	8	CNA	1	Ø10	12.6	12.6	12.6	- *	- *	- *

** No capacities are given as it is a slip connection due to oblong hole.*
To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

Technical Sheet

ER

Reinforced Angle Bracket

Installation

Befestigung

On wood:

- CNA annular ring-shank nails dia. 4.0 x 35 or dia. 4.0 x 50 mm.
- CSA screws dia. 5.0 x 35 mm or CSA screws dia. 5.0 x 40 mm.
- Bolts.
- LAG screws.
- SSH Ø 10.0 x 40 mm (for E5/1.5 and E5/1.5/11.22/11)

On concrete:

Concrete substrate

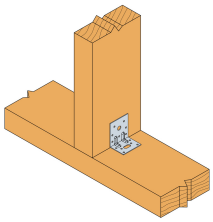
- *Mechanical anchor:* WA M10-78/5 OR WA M12-104/5 pin.
- *Chemical anchor:* AT-HP resin + LMAS M10-120/25 or LMAS M12-150/35 threaded rod.

Hollow masonry substrate:

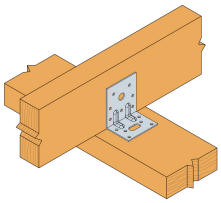
- *Chemical anchor:* AT-HP or POLY-GP resin + LMAS M10-110/35 threaded rod with SH16x130 screen or LMAS M12-150/35 with SH20130 screen

On steel:

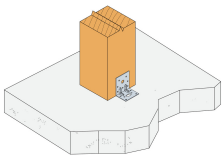
- Bolts.



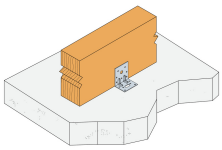
Post connection



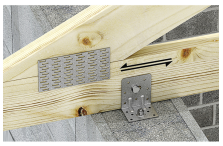
Beam connection



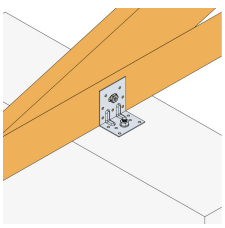
Post connection



Beam connection



E5 - Fastening Timber on rigid support/ sliding support



Technical Notes

Informations

F1: tensile force in the central axis of the angle-bracket
Particular situation of a fastening with only one angle-bracket:

- If the overall structure prevents the rotation of the purlin or the post, the tensile strength is equal to half of the given value for two angle-brackets.
- Otherwise, the connection resistance depends on the « f » distance between the vertical contact surface and the point of load application.

F2 and F3: shear lateral force
Particular situation of a connection with only one angle-bracket:

- The resistance value to consider is equal to half of the one given for two angle-brackets.

F4 and F5: transversal force directed towards or opposite the angle-bracket

- The connection resistance depends on the « e » distance between the base of the angle-bracket and the point of load application.
- To consult corresponding loads, contact us.

Only F1, F2 and F3 forces for connections with 2 angle-brackets are present on this sheet.
For more information, contact us.

Copyright by Simpson Strong-Tie®