

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

Vorteile

.

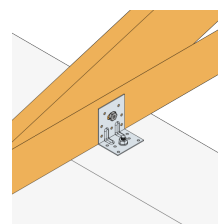
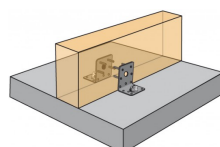
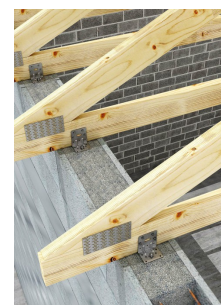
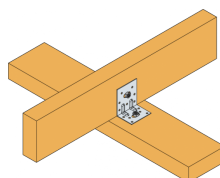
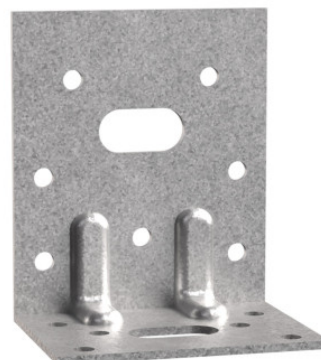
Applications

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

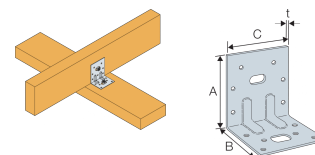
- Befestigungen von Holzbalken, Holzstützen an Pfetten oder Hauptträger



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Technical Data

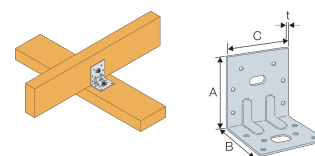
Product Dimensions



| Art. nr. | Rozměry a typické hodnoty [mm] | | | | Příruba A | | Hlava | |
|----------|--------------------------------|------|----|-----|-----------|-----|-------|--------|
| | A | B | C | t | Ø5 | Ø13 | Ø5 | Ø12x20 |
| E4/2.5 | 102.5 | 62.5 | 75 | 2.5 | 7 | 1 | 6 | 1 |

*angle bracket folded at 135°

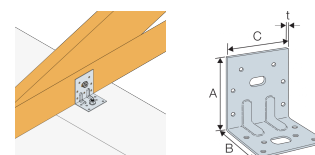
Product characteristic capacities - Timber beam to timber beam - full nailing - assembly with 2 angle brackets



| Art. nr. | Product capacities - Timber to timber - Beam to beam - Full nailing | | | | | | | | | |
|----------|---|----------|---|-----------|-----------|-----------|-------------------------------------|-----------|-----------|-----------|
| | Upevňovací prvky | | Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN] | | | | | | | |
| | Příruba A | Hlava | R _{1,k} | | | | R _{2,k} = R _{3,k} | | | |
| | 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



| Art. nr. | Product capacities - Timber beam to rigid support | | | | | | | | | |
|----------|---|-----|---|-----|------------------|-----------|-----------|-------------------------------------|-----------|-----------|
| | Upevňovací prvky | | Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN] | | | | | | | |
| | Příruba A | | Hlava | | 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.

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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

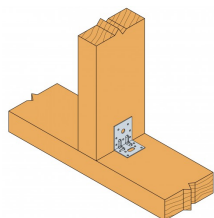
- *Mechanical anchor:* WA M10-78/5 OR WA M12-104/5 pin.
- *Chemical anchor:* AT-HP resin + LMAS M10-120/25 or LMAS M12-150/35 threaded rod.

Hollow masonry substrate:

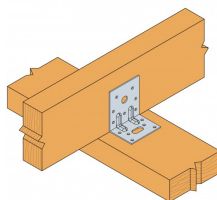
- *Chemical anchor:* AT-HP or POLY-GP resin + LMAS M10-110/35 threaded rod with SH16x130 screen or LMAS M12-150/35 with SH20130 screen

On steel:

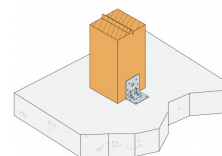
- Bolts.



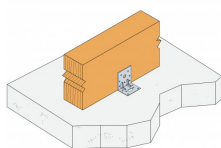
Post connection



Fixation bois/bois - Type poutre/poutre



Fixation bois/support rigide - Type poteau



Beam connection

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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.

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