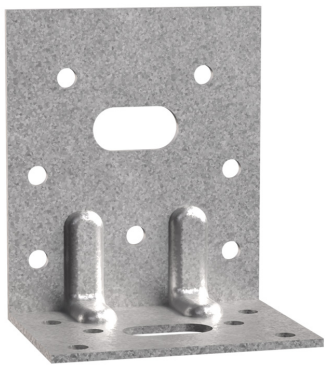
Technical Sheet

ER
Reinforced Angle Bracket

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



Features

Material

- Galvanized steel S250GD + Z275 according to NF EN 10346.

Applications

Header member

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

For Use With

- Fastening of small trusses.
- Cladding plates, cladding uprights.
- Rafter anchors, cantilevers, headers, etc.

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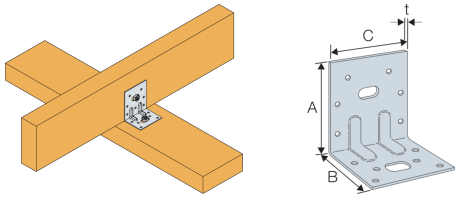
Technical Data



Product Dimensions

Reference	Connector Dimensions
	Other
	Weight[kg]
E5/1.5	0.084
E4/2.5	0.22
E5/2C50	0.12

*angle bracket folded at 135°

Installation

Fixing

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.

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:

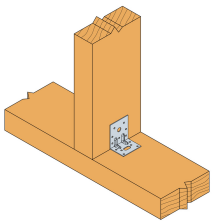
- *Chemical anchor:* AT-HP or POLY-GP resin + LMAS M12-150/35 threaded rod + SH M16-130 screen.

On steel:

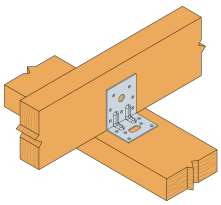
- Bolts.

Installation

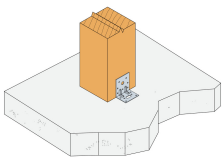
1. Come with the joist,
2. Add nails. It can be also screwed,
3. If the header is made out of timber, the angle bracket can be attached to it with nails or screw,
4. If the header is made out of concrete, the angle bracket must be attached with adapted anchors (using the installation data from the anchor)



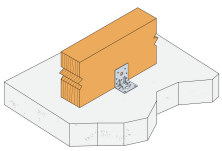
Post connection



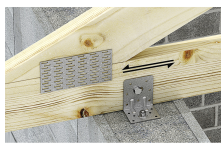
Beam connection



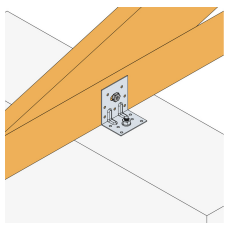
Post connection



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.

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