



Reinforced angle brackets are suitable for structural applications in framing and timber framed houses as well as light gauge steel construction.



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

## FEATURES



### Material

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

### Benefits

- Reinforcing ribs provide enhanced performance.



ABR7015



ABR9020



ABR10525

## APPLICATIONS

### Suitable On

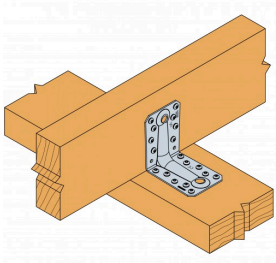
- Supporting member:** solid wood, glued-laminated wood, concrete, steel, etc.
- Supported member:** solid wood, composite lumber, glued-laminated wood, triangular trusses, profiles, etc.

### When to Use

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

TECHNICAL DATA

Product Dimensions



References	Tun / DB nr.	NOB nr.
ABR7015	1553168	45554233
ABR9020	1241531	41327099
ABR10525	1553164	45540683

Combined loads:

$$\sqrt{\left(\frac{F_{1,d}}{R_{1,d}} + \frac{F_{4/5,d}}{R_{4/5,d}}\right)^2 + \left(\frac{F_{2/3,d}}{R_{2/3,d}}\right)^2} \leq 1$$

## 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

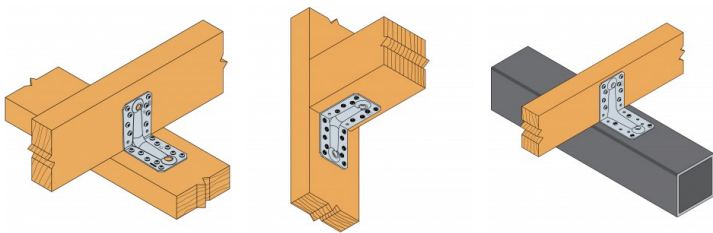
- Mechanical anchor: WA M10-78/5 OR WA M12-104/5 pin.
- Chemical anchor: AT-HP resin + LMAS M10-120/25 or LMAS M12-150/35 threaded rod.

##### Hollow masonry substrate:

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

#### On steel:

- Bolts.



## TECHNICAL NOTES

### Technical Notes

#### **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.