

# Technical data sheet

**SIMPSON**

**Strong-Tie**

## AB Angle brackets

*AB angle brackets are used for assemblies in supporting wood construction. The connectors are used in wood-wood assemblies, wood-concrete assemblies, exchanges etc.*

### Features

#### Material

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

#### Benefits

#### Angle bracket for supporting constructions

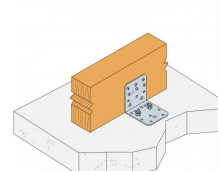
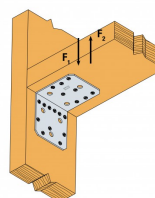
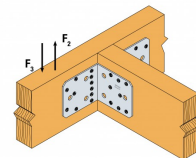
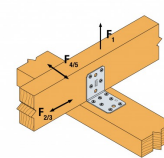
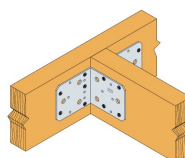
### Applications

#### 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.

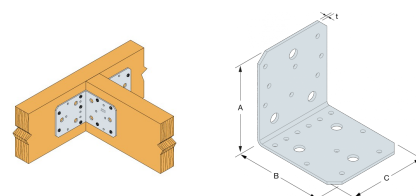
#### When to Use

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



## AB Angle brackets

## Technical Data



### Product Dimensions

| References | Tun / DB nr. | NOB nr.  | Product Dimensions [mm] |     |    |     | Holes flange A |      |     | Holes flange B |      |     | Box Quantity | Weight [kg] |
|------------|--------------|----------|-------------------------|-----|----|-----|----------------|------|-----|----------------|------|-----|--------------|-------------|
|            |              |          | A                       | B   | C  | t   | Ø5             | Ø8.5 | Ø11 | Ø5             | Ø8.5 | Ø11 |              |             |
| AB90       | 3779303      | 21220785 | 88                      | 88  | 65 | 2.5 | 6              | -    | 3   | 9              | -    | 2   | 100          | 0.2         |
| AB105      | 3779329      | 21220801 | 103                     | 103 | 90 | 3   | 8              | -    | 3   | 11             | -    | 3   | 50           | 0.38        |

### Characteristic Values - CLT/Rigid Substrate

| References | Fasteners |          |      | Characteristic Values - CLT/Rigid Substrate [kN] |                                     |
|------------|-----------|----------|------|--|-------------------------------------|
|            | Flange A  | Flange B |      | R <sub>1,k</sub>                                 | R <sub>2,k</sub> = R <sub>3,k</sub> |
|            | Qty       | Qty      | Type | CNA4.0x50  | CNA4.0x50                           |
| AB90       | 5         | 2        | M10  | 3  | 3.1                                 |
| AB105      | 5         | 2        | M10  | 6.2  | 3.2                                 |

The published characteristic capacity is based on instantaneous load duration and service class 2 according to EC5 (EN 1995) –  $k_{mod} = 0.9$ . For other load duration and service class, please refer to the ETA.

## AB Angle brackets

# Installation

### Fixing

#### **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.

#### **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 information

#### **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.

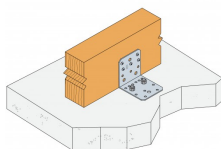
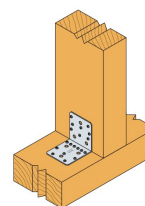
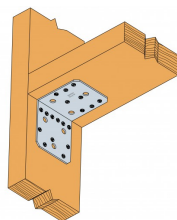
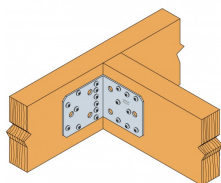
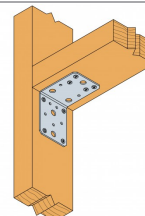
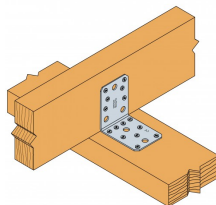
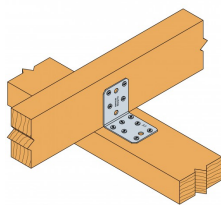
#### **F4 and F5: transversal force directed towards or opposite the angle-bracket**

- 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.***

## AB Angle brackets



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AB  
Angle brackets

2025-07-03



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