

Technical data sheet

SIMPSON

Strong-Tie

AB Angle brackets

AB angle brackets are used for assemblies in supporting wood constructions. 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

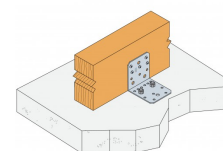
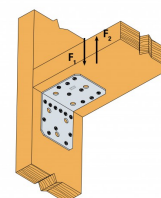
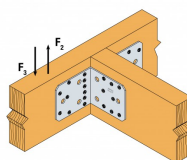
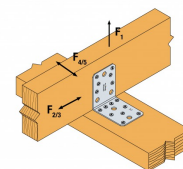
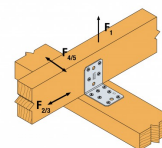
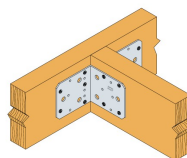
Applications

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

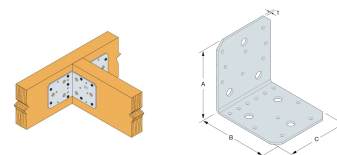
- Fastening of small trusses.
- Cladding plates, cladding uprights.
- Rafter anchors, cantilevers, headers, etc.



AB Angle brackets

Technical Data

Product Dimensions



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

Characteristic Values - CLT/Rigid Substrate

References	Fasteners			Characteristic Values - CLT/Rigid Substrate [kN]	
	Flange A	Flange B		R _{1,k}	R _{2,k} = R _{3,k}
	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.

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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.

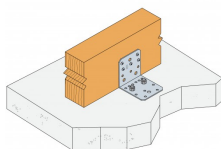
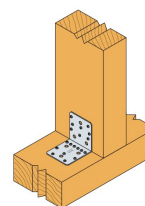
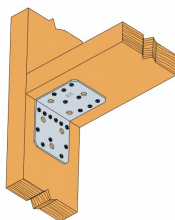
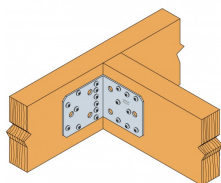
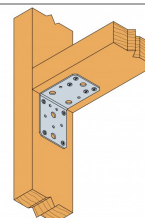
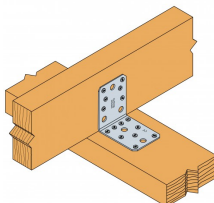
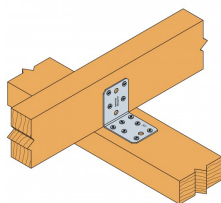
F4 and F5: transversal force directed towards or opposite the angle-bracket

- 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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Angle brackets

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