Technical data sheet ABR - REINFORCED ANGLE BRACKET (105-R)



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



SIMPSO

Strong-

UK-DoP-e06/0106, ETA-06/0106

FEATURES



Material

• Pre-galvanised mild steel.

Benefits

- Load capacity in all directions
- Improved capacities for full and partial nailing



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.

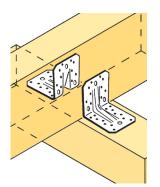
When to Use

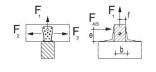
- Fastening of small trusses.
- Cladding plates, cladding uprights.
- Rafter anchors, cantilevers, headers, etc.

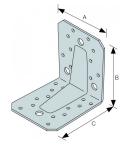
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TECHNICAL DATA

Dimensions





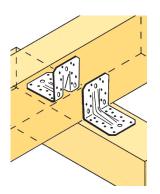


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References	Dimensions			Holes leg B		Holes leg C			
	А	В	С	t	nails or screws	bolts	nails or screws	bolts	
	ABR105-R	90	105	105	3	14 ø5	1 ø11	10 ø5	3 ø11

Wood/wood connection beam/beam type - assembly with 2 angle brackets



References	Fixing		Characteristic Values				
	leg B	leg C	Tensic	on (F1)	Shear (F2=F3)		
			CNA4.0x35	CNA4.0x50	CNA4.0x35	CNA4.0x50	
ABR105-R	14	10	8.9 14.3		13.6	19.1	

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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 Info

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.

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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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