ABR - REINFORCED ANGLE BRACKETS

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

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

FEATURES

CL2 INDOOR Z275

Material

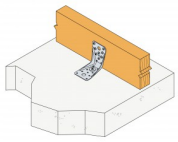
- Galvanized steel S250GD + Z275 according to NF EN 10346.

Benefits

- High rigidity through double-sided splash back
- High load values

ABR9015

ABR100



APPLICATIONS

Suitable On

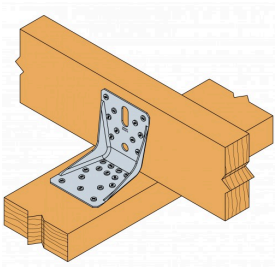
- **Supporting member**: solid wood, glued-laminated wood, concrete, steel, etc.
- **Supported member**: solid wood, composite lumber, glued-laminated wood, triangular trusses, profiles, etc.

When to Use

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

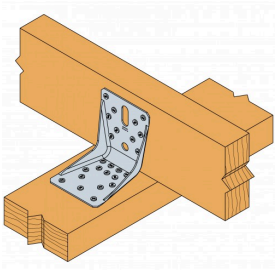
TECHNICAL DATA

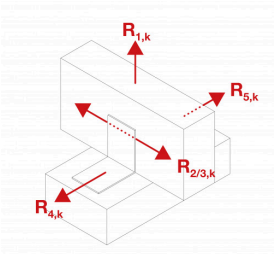
Product Dimensions



References	Product Dimensions [mm]				Joist [mm]			Holes flange B [mm]		
	A	B	C	t	Ø5	Ø12	Ø13	Ø5	Ø12	Ø13
ABR9015	89	89	60	1.5	10	-	1	10	-	1
ABR100	100	100	90	2	10	1	-	14	1	-

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



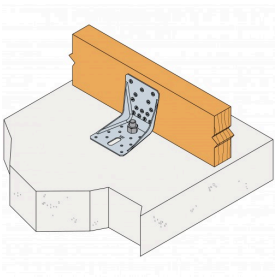


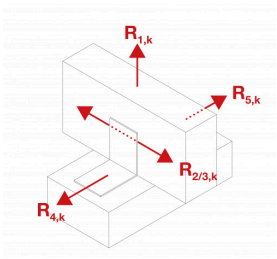
References	Product capacities - Timber to timber - Full nailing													
	Number of Fasteners		Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]											
	Joist	Flange B	$R_{1.k}$				$R_{2.k} = R_{3.k}$				$R_{4.k} = R_{5.k}$ [1]			
	Qty	Qty	CNA4.0x4	CNA4.0x5	CNA4.0x6	CSA5.0x4	CNA4.0x4	CNA4.0x5	CNA4.0x6	CSA5.0x4	CNA4.0x4	CNA4.0x5	CNA4.0x6	CSA5.0x4
ABR9015	8	10	4.1	5.4	6.6	11.6	7.1	8	9.6	10.5	-	-	-	5 / kmod^0,4
ABR100	10	14	11.7	15.7	19.7	min (26,7/ kmod^0,2 ; 27 / kmod)	12.8	14.2	16.7	20.3	4.2	5.1	5.1	5.1

[1] b = 75 mm ; e = 130 mm

To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

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

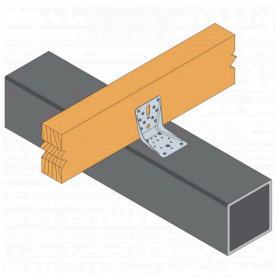


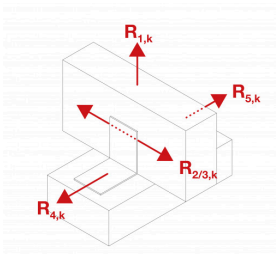


References	Product capacities - Timber beam to Concrete								
	Number of Fasteners				Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]				
	Joist		Flange B		$R_{1,k}$		$R_{2,k} = R_{3,k}$		$R_{4,k} = R_{5,k}$
	Qty	Type	Qty	Type	CNA4.0x40	CNA4.0x50	CNA4.0x40	CNA4.0x50	CNA4.0x40
ABR100	1	Ø10	10	CNA*	min (20,6; 21,6 /kmod)	min (26,6; 21,6 /kmod)	8.7	10.9	10.4

* Refer to Characteristic Capacity table columns for type of fasteners that can be used in Flange A. Capacities vary depending on fastener type used. To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

Characteristic capacities - Timber to steel - Connection with 2 brackets





References	Product capacities - Timber to Steel				
	Number of Fasteners				Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]
	Joist		Flange B		$R_{1,k}$
	Qty	Type	Qty	Type	CNA4.0x60
ABR100	10	CNA*	4	PDPA-75	21.5

To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

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

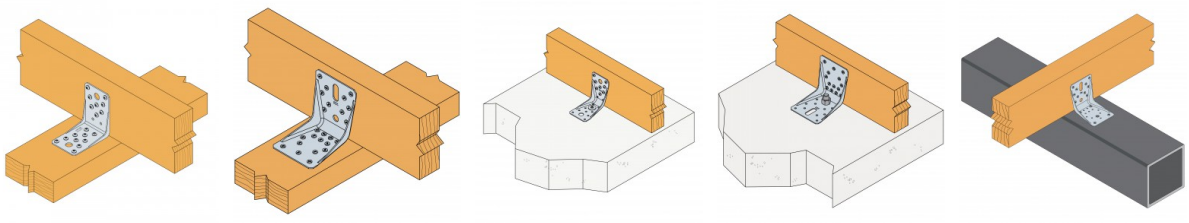
- Mechanical anchor: WA M10-78/5 OR WA M12-104/5 pin.
- Chemical anchor: AT-HP resin + LMAS M10-120/25 or LMAS M12-150/35 threaded rod.

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