

ABR-S  
**Stainless steel frame bracket (100S)**

The ABR100S is reinforced bracket which responds to structural applications on a wooden support or concrete. This bracket is recommended in aggressive atmospheres.

## Features

### Material

**Steel quality:**

- **Stainless steel 1.4401 or 1.4404 (V4A) in accordance with EN10088.**
- **The types of stainless steel that we use are the corrosion resistance class III**

### Benefits

- **High rigidity through double-sided splash back**
- **High load values**
- **Optimized nail image**
- **ABR-S (100): Ø12mm holes for M10 bolts**
- **ABR-S (100): concrete connection possible with just one bolt**
- **ABR-S (9015): Less Weight- thus better handling in the warehouse**
- **ABR-S (9015): Ø13 mm bolt holes for constructive fixings**

## Applications

### Applicatons

**In Stock:**

- **wood, concrete, steel**

**Component:**

- **wood, suitable wooden construction**

### Scope

- **for fixing wood to concrete**



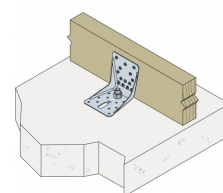
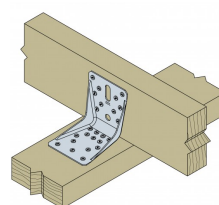
Équerre de structure Inox ABR100S



Wood to wood connection.



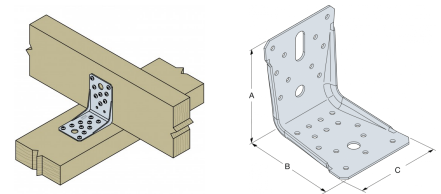
Timber to masonry connection



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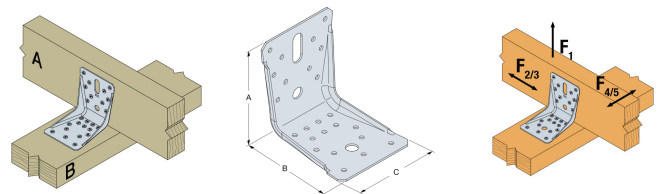
## Technical Data

### Product Dimensions



References	Product Dimensions [mm]				Joist				Holes flange B			Box Quantity
	A	B	C	t	Ø5	Ø12	Ø13	Ø12x32	Ø5	Ø12	Ø13	
ABR100S	100	100	90	2	10	1	-	1	14	1	-	50

### Product capacities - Beam to beam - Full nailing



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 <sub>1,k</sub>			R <sub>2,k</sub> = R <sub>3,k</sub>			R <sub>4,k</sub> = R <sub>5,k</sub> <sup>(1)</sup>	
	Qty	Qty	CNA4.0x35S	CNA4.0x50S	CSA5.0x40S	CNA4.0x35S	CNA4.0x50S	CSA5.0x40S	CNA4.0x50S	CSA5.0x40S
ABR100S	10	14	9.7	15.4	min (25.6 ; 25.1/kmod)	9.6	14.2	20.3	4.2	4.2

1) b = 75 mm ; e = 130 mm

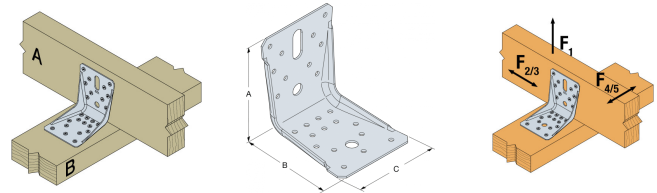
Combined load:

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

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.

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Product capacities - Timber to Concrete



References	Product capacities - Timber to Concrete								
	Number of Fasteners				Characteristic capacities - Timber C24 - 2 angle brackets per connection [kN]				
	Joist		Flange B		$R_{1,k}$		$R_{2,k} = R_{3,k}$		$R_{4,k} = R_{5,k}$ <sup>(1)</sup>
	Qty	Type	Qty	Type	CNA4.0x35S	CNA4.0x50S	CNA4.0x35S	CNA4.0x50S	CNA4.0x50S
ABR100S	1	Ø10	10	CNA*	16.7	min (26.6 ; 21.6/kmod)	7.3	10.8	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.

1) b = 75 mm ; e = 130 mm

Refer to the Simpson Strong-Tie anchor product range for suitable anchors. Typical anchor solutions are BOAXII, SET-XP, WA, AT-HP, depending on the concrete type, spacing and edge distances.

Combiend load :

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

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.

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## Installation

### Fasteners

- connections using screws or nails CSA5,0x1 CNA4,0x1

### Installation

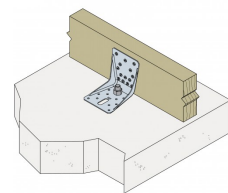
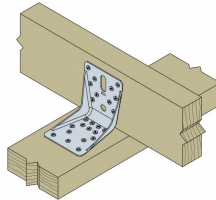
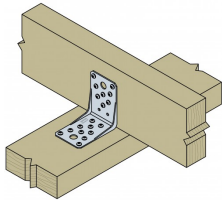
- For fixing stainless comb nails, screws or bolts of comparable steel quality must be used to prevent contact corrosion



Wood to wood connection.



Timber to masonry connection



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