Technical Sheet

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 grade:

- **Stainless steel 1.4401 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**



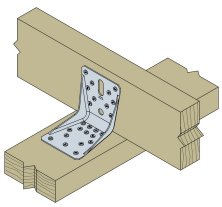
ABR100S - stainless steel

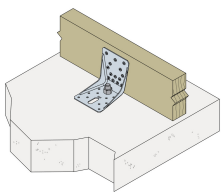


Wood to wood connection.



Timber to masonry connection







ABR100S - stainless steel



ABR100S - stainless steel



Wood to wood connection.



Timber to masonry connection

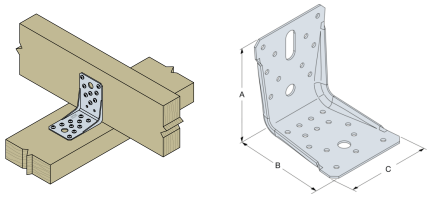
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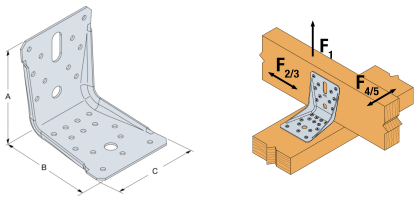
Technical Data

Product Dimensions



Reference	Connector Dimensions												
	Product Dimensions[mm]				Joist[mm]				Flange B[mm]			Other	
					Round			Obround	Round				
	A[mm]	B[mm]	C[mm]	Thickness[mm]	Ø5[mm]	Ø12	Ø13	Ø12x32	Ø5[mm]	Ø12	Ø13[mm]	Qty per Box	Weight[kg]
ABR100S	100	100	90	2	10	1	-	1	14	1	-	50.0	0.26

Product capacities - Beam to beam - Full nailing



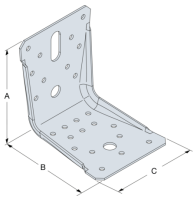
Reference	Angle bracket capacity									
	Product capacities - Timber to timber - Full nailing									
	Number of Fasteners		Characteristic capacity - 2 angle brackets per connection - full nailing[kN]							
	Joist	Flange B	$R_{1,k}$			$R_{2,k}=R_{3,k}$			R4,k = R5,k(1)	
	Qty	Qty	CNA4.0x35	CNA4.0x50	CSA5.0x40S	CNA4.0x35	CNA4.0x50	CSA5.0x40S	CNA4.0x50	CSA5.0x40S
ABR100S	10.0	14.0	9.7	15.4	min (25.6 ; 25.1/kmod)	9.6	14.2	20.3	4.2	4.2

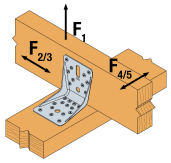
[1] b = 75 mm ; e = 130 mm
Combined load:
\sqrt{\left (\frac {F_{1,d}} {R_{1,d}} + \frac {F_{4/5,d}}{R_{4/5,d}} \right)^2 + \left (\frac{F_{2/3,d}}{R_{2/3,d}} \right)^2} \le 1
To obtain the resistance values for a single bracket, the values in the above table should be divided by two, provided that the supported beam is locked in rotation. Please consult our ETA-06/0106 if the beam is free to rotate.

Technical Sheet

ABR-S

Stainless steel frame bracket (100S)





Product capacities - Timber to Concrete

Reference	Angle bracket capacity								
	Product capacities - Timber to Concrete								
	Number of Fasteners				Characteristic capacity - 2 angle brackets per connection - full nailing[kN]				
	Joist		Flange B		$R_{1,k}$		$R_{2,k}=R_{3,k}$		R4/5,k
	Qty	Type	Qty	Type	CNA4.0x35	CNA4.0x50	CNA4.0x35	CNA4.0x50	CNA4.0x50
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} \le 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.

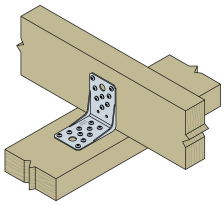
Installation

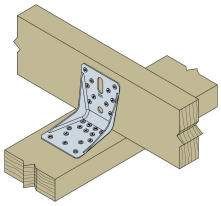
Fasteners

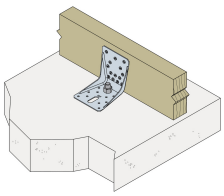
- **connections using screws or nails CSA5,0xl CNA4,0xl**

Installation

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

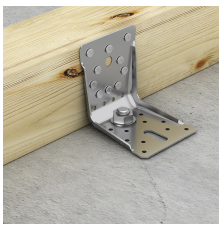








Wood to wood connection.



Timber to masonry connection

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