

Technical Sheet

SIMPSON

Strong-Tie

ABR-S

Stainless Steel Bracket

The ABR angle brackets with rib can be used in high loaded timber structures. These brackets are made of stainless steel and are recommended in aggressive atmospheres

Features

Material

Steel quality:

- **Stainless Steel 1.4401 or 1.4404 in accordance with EN10088 standards.**
- **Class III corrosion resistance**

Benefits

- **Reinforcing ribs provide enhanced performance**

Applications

When to use

- **ABR angle bracket are particularly suitable for connections of crossed beams, e. g. for connections rafters on purlins and purlins on timber beams.**

Applications

Supporting member:

- Solid wood, engineered wood

Supported member:

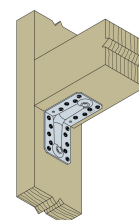
- Solid wood, engineered wood



ABR9020S



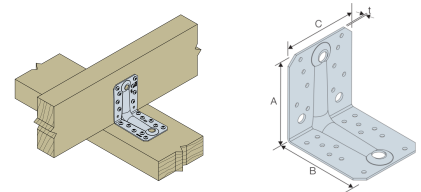
ABR10525S



ABR-S Stainless Steel Bracket

Technical Data

Product Dimensions

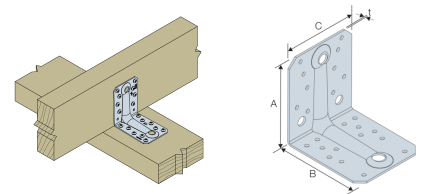


Reference	Connector Dimensions													
	Other		Product Dimensions[mm]				Joist[mm]				Flange B[mm]			
	Qty per Box	Weight[kg]	A[mm]	B[mm]	C[mm]	Thickness[mm]	Round				Round			
							Ø5[mm]	Ø7	Ø11[mm]	Ø14[mm]	Ø5[mm]	Ø9	Ø13[mm]	Ø14[mm]
ABR9020S	25.0	0.17	88	88	65	2	10	-	1	-	10	-	1	-
ABR10525S	25.0	0.34	105	105	90	2.5	10	-	2	1	14	-	-	1

Combined load:

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

Simplified product capacities - Beam to beam - Maximum nailing



Reference	Angle bracket capacity										
	Simplified product capacities - Timber to timber – Beam to beam - Full nailing										
	Number of Fasteners		Characteristic Capacities - Timber C24 - 2 Angle Brackets per Connection[kN]								
	Joist	Flange B	R1,k			R2,k = R3,k			R4/5,k		
	Qty	Qty	CNA4.0x35	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x50	CNA4.0x60	CNA4.0x35	CNA4.0x50	CNA4.0x60
ABR9020S	8.0	10.0	9.7	11.9	14.9	9.4	12.2	13	4.9	-	6.2
ABR10525S	10.0	14.0	12.7	23.6	29.5	10.7	18.5	19.7	10.8	-	14.3

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

Fixings

- **Fixings must be stainless steel nails (CNA-S) or screws (CSA-S) to avoid bi-metallic corrosion.**

