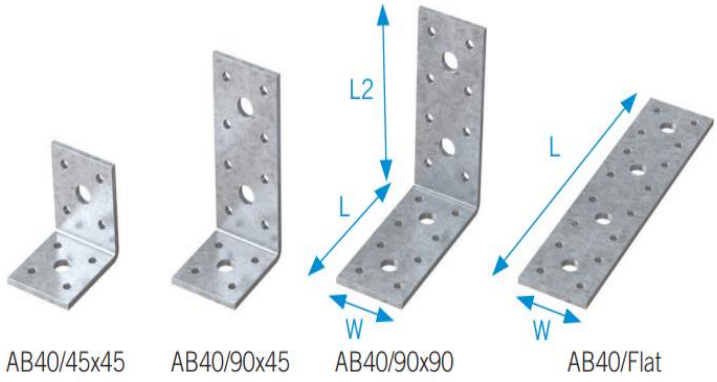
AB40 Heavy Duty Angle Brackets

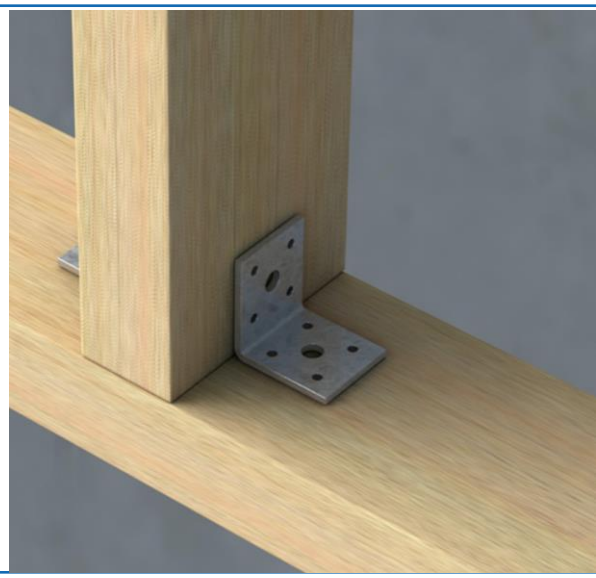
Data Sheet

CE

Angle Brackets

Produced from galvanised steel to BS EN 10346:2009 + G275 as standard, or stainless steel grade 304 to BS EN 10088-2 Grade 1.4301, available to order.





AB40 Heavy Duty Angle Brackets

Manufactured from heavy duty 3mm thick galvanised steel, these 40mm wide brackets and plates provide a strong connection allowing for the use of bolts, nails, screws and coach screws.
Suitable for timber to timber, timber to masonry and timber to steel applications. **Box quantity 100.**

Test Standard

Tested by BMTRADA to ETAG015

Verified by TZUS to EAD 130186-00-0603. – ETA 20/0915.

Declaration of Performance – Angle Brackets 19-0681-002

Dimensions

Product code	Dimensions [mm]			Holes no. x Ø [mm]	
	W	L	L2	Plate 1 (L)	Plate 2 (L2)
AB40/45x45	40	45	45	4 × 5.0 1 × 10.0	4 × 5.0 1 × 10.0
AB40/90x45	40	90	45	8 × 5.0 2 × 10.0	4 × 5.0 1 × 10.0
AB40/90x90	40	90	90	8 × 5.0 2 × 10.0	8 × 5.0 2 × 10.0
AB40/175Flat	40	175	-	16 × 5.0 4 × 10.0	

Head Office: BPC Building Products Ltd, Flanshaw Way, Wakefield WF2 9LP
Tel: 01924 364794 **Fax:** 01924 373846

web: www.bpcfixings.com **email:** sales@bpcfixings.com

AB40 Heavy Duty Angle Bracket

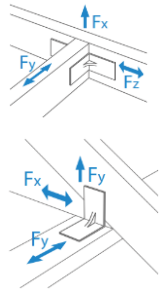
Data Sheet

CE

Load Data

These properties should be used for design in accordance with EN 1995-1-1:2004/A1 (Eurocode 5) or an appropriate national code. The load-carrying capacities have been derived by calculation or design assisted by testing or by testing.

Product code	Characteristic Capacity [kN] - Per pair																	
	C16 timber						C24 timber						TR26 timber					
	Type A nails			Type B nails			Type A nails			Type B nails			Type A nails			Type B nails		
	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$	$F_{x,k}$	$F_{y,k}$	$F_{z,k}$
AB40/45x45	3.37	1.44	4.49	3.94	3.00	5.90	3.70	1.62	4.95	4.34	3.38	6.55	3.86	1.71	5.18	4.54	3.58	6.87
AB40/90x45	3.58	1.44	5.14	4.19	3.00	6.51	3.93	1.62	5.60	4.62	3.38	7.11	4.11	1.71	5.83	4.83	3.58	7.40
AB40/90x90	6.76	2.75	7.41	7.91	4.22	8.14	7.42	2.93	7.90	8.71	4.51	8.68	7.75	3.03	8.07	9.11	4.65	8.88



The characteristics load-carrying capacities stated above refer to brackets used in pairs, in timber to timber connection

Fixings

Fix using either Type A, 30 x 3.75mm Sherardised Square Twist Nails OR Type B, 35 x 3.75mm. Sherardised Square Twist nails in all pre-punched holes.

Type	Description	d [1] (mm)	l (mm)	$f_{ax,k}$ [2] (N/mm²)	f_u (N/mm²)
A	Square twist nails Sherardized finish Normally supplied loose for manual fixing	3.4	30	4.78	600
B	Square twist nails Sherardized finish Normally supplied collated for a nail gun	3.4	35	4.3	700

[1] This diameter is the minimum cross-section dimension in accordance with EN 14592. Square twist nails are often described in the market by their largest cross-section dimension, so that a 3.4 mm diameter nail will be sold as being 3.75 mm diameter.

[2] In timber with a characteristic density ρ_k of 350 kg/m³, i.e. C24 timber. At other values of ρ_k the value is modified so $f_{ax,k} = f_{ax,k} \cdot \min\left(\frac{\rho_k}{350}, 1.1\right)$

Installation

BPC Connectors are deemed fit for their intended use provided:

- The joints are designed in accordance with Eurocode 5 or an appropriate National Code using the characteristic values given in the Annexes. Design and detailing of structures should be carried out by suitably experienced persons in accordance with the manufacturer's instructions.
- Sides of the hanger should be at least 60% of the timber height to prevent rotation.
- Joist ends to be cut square with no more than 6mm gap from the rear of the hanger.
- Verifiable calculation, notes and drawings are prepared taking account of the loads to be carried.
- The widths of the joist narrower than the exact joist hanger width does not exceed the tolerance of +0/-4mm to the joist hanger width
- The header supporting the joist is adequately restrained against rotation.
- Specified fasteners are installed in all available holes of the same diameter.
- Timber should be free of wane in the connectors.
- The actual maximum bearing capacity of the joist itself is checked separately by the designer of the structure.
- The eccentricity of the acting forces relative to the axis of the connection is not excessive.
- The connectors have been installed correctly by appropriately qualified personnel using adequate tools, in accordance with the relevant building regulations, the manufacturer's specifications and the drawing prepared for that purpose.

Head Office: BPC Building Products Ltd, Flanshaw Way, Wakefield WF2 9LP
Tel: 01924 364794 **Fax:** 01924 373846

web: www.bpcfixings.com **email: sales@bpcfixings.com**