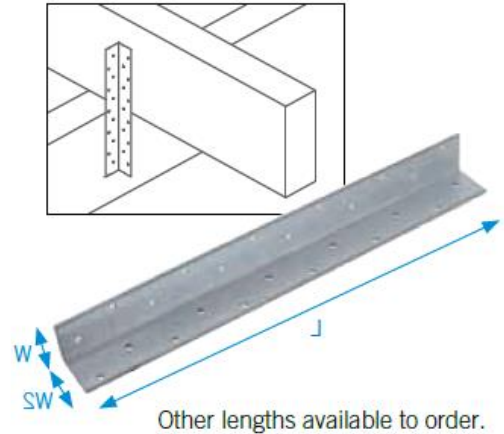


HDA Holding Down Angles

A heavy duty general purpose angle plate manufactured from 2.0mm thick galvanised steel to BS EN 10346:2009 +G275. Box quantity 50.



Material Specification

Manufactured from 2.0mm thick galvanised steel to BS EN 10346:2009 G275 as standard, or stainless steel available to order.

Test Standard

Tested by [bmt rtda](#) to ETAG015 – [European Technical Approval 19/0681](#).
Declaration of Performance – [Joist Hangers 19-0681-001](#).

Dimensions & Load Data

Load data refers to components used in pairs and sets of four.
Connectors should not be used singly.

Product code	Dimensions [mm]			Holes no. x Ø [mm]		Characteristic Capacity [kN]	
	L	W	W2	Plate 1	Plate 2	No of connectors	F _{x,k}
HDA/300	300	32	32	12 x 4.0	12 x 4.0	2	7.5
						4	20
HDA/500	500	32	32	20 x 4.0	20 x 4.0	2	7.5
						4	20

These properties should be used for designs 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.

Fixings

Fix using either Type A, 30x3.75mm Sherardised Square Twist Nails or Type B, 35x3.75mm Sherardised Square Twist nails in all pre-punched holes.

Type	Description	d^1 (mm)	l (mm)	$f_{ax,k}^2$ (N/mm ²)	f_u (N/mm ²)
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.
- 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 width of joists 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.