

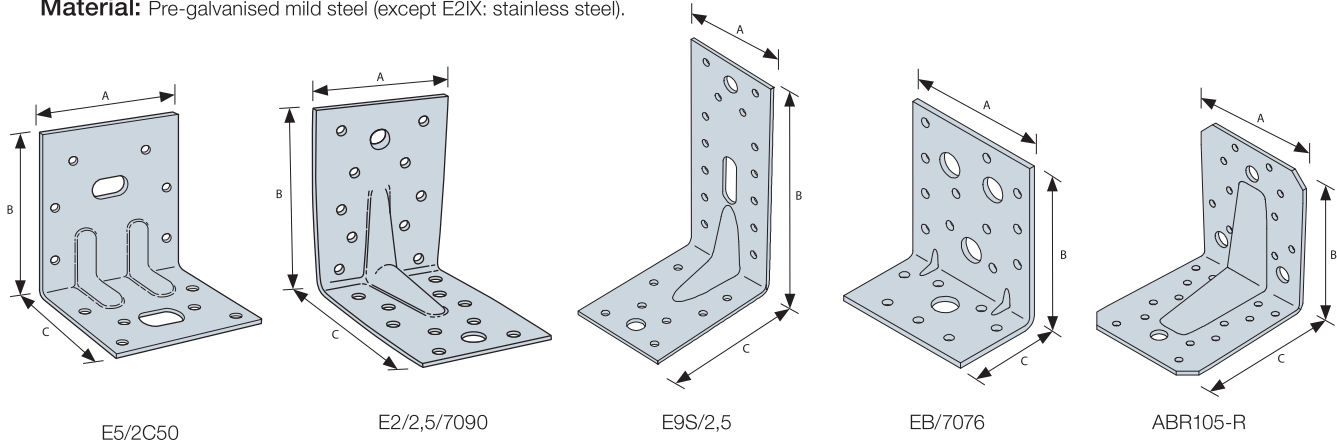
Angle Brackets and Ties

ABR/E/EB Reinforced Angle Brackets

Heavy angles for general connecting of timber at 90° angles. Reinforced ribs add extra rigidity.

Typical application include fixing trusses, purlins and posts. Suitable support materials include solid timber, composite timber, laminated timber and trusses.

Material: Pre-galvanised mild steel (except E2IX: stainless steel).



Model No.	Dimensions (mm)				Fixing Holes			
	Thickness	A	B	C	Nails		Bolts	
					Leg B	Leg C	Leg B	Leg C
E5/2C50	2.0	65	75	48	7	6	1 ⁽¹⁾	1 ⁽¹⁾
E2/2,5/7090	2.5	65	90	90	10	10	1 ⁽²⁾	1 ⁽²⁾
E2IX ⁽⁵⁾	2.5	65	90	90	10	10	1 ⁽²⁾	1 ⁽²⁾
E9S/2,5	2.5	65	150	90	14	8	2 ⁽²⁾	1 ⁽²⁾
E9/2,5	2.5	65	150	150	14	14	2 ⁽²⁾	2 ⁽²⁾
EB/7070	2.0	55	70	70	6	6	1 ⁽⁴⁾	1 ⁽⁴⁾
EB/7076	3.0	76	90	48	12	7	3 ⁽³⁾	1 ⁽³⁾
ABR105-R	3.0	90	105	105	14	10	1 ⁽²⁾	3 ⁽²⁾

- 11mm Obround.
- 11mm.
- 13mm.
- 8.5mm.
- Manufactured from Stainless Steel.

Connection with Timber/Timber type Beam/Beam: 2 Brackets

Model No.	Fixing Holes		Characteristic Values (kN)			
	Nails		Tension (F ₁)		Shear (F ₂ =F ₃)	
	Leg B	Leg C	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽²⁾	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽²⁾
E5/2C50	7	6	5.20	6.40	4.90	6.40
E2/2,5/7090	10	10	6.60	10.60	7.60	10.50
E9S/2,5	14	8	4.70	7.70	8.70	11.90
E9/2,5	14	14	4.90	8.20	9.30	13.00
EB/7070	6	6	4.40	7.10	4.40	6.80
EB/7076	12	7	4.90	7.90	10.70	16.30
ABR105-R	14	10	8.90	14.30	13.60	19.10

Connection with Timber/Timber type Post/Beam: 2 Brackets

Model No.	Fixing Holes		Characteristic Values (kN)			
	Nails		Tension (F ₁)		Shear (F ₂ =F ₃)	
	Leg B	Leg C	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽²⁾	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽²⁾
E9S/2,5	14	8	2.80	4.80	7.10	9.80
E9/2,5	14	14	3.10	5.10	6.70	9.60

Connection with Timber/Concrete Support type Beam/Rigid Support: 2 Brackets

Model No.	Fixing Holes		Characteristic Values (kN)			
	Nails	Bolts	Tension (F ₁)		Shear (F ₂ =F ₃)	
	Leg B	Leg C	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽¹⁾	Ø 4.0 x 35mm ⁽¹⁾	Ø 4.0 x 50mm ⁽¹⁾
E5/2C50	7	1 Ø M10	3.90	6.00	2.20	2.90
EB/7076	12	1 Ø M12	12.70	16.80	6.90	11.05

- 4.0 x 35mm refers to a 35mm long CNA connector nail with a diameter of 4mm.
- 4.0 x 50mm refers to a 50mm long CNA connector nail with a diameter of 4mm.
- Full nailing conditions apply.
- Load capacities are only applicable when using 4mm diameter annular ring shank nails.