

A21 A23 – Reinforced Angle Bracket

Material: Carbon Steel 1.3mm thick

Finish: Z275 Galvanised

Corrosion Resistance Level
LOW

Size: See illustration on the right

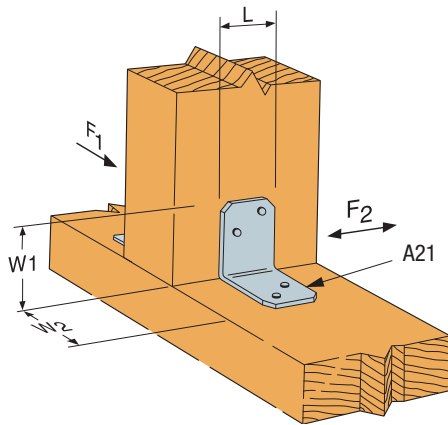
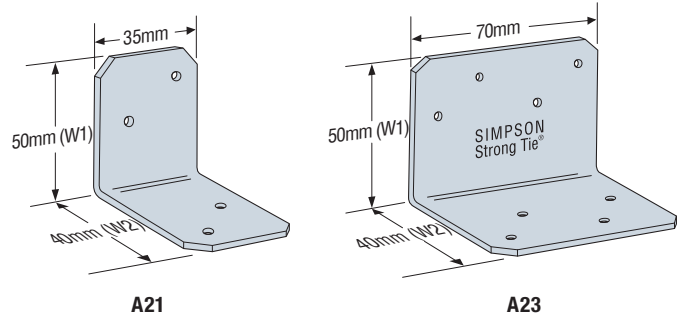
Features & Benefits

- Removes the guesswork for making perfectly square connections
- Reinforces 90-degree connections
- Stronger than angled nailing or screw fastening
- Staggered fastener pattern reduces the chances of timber splitting

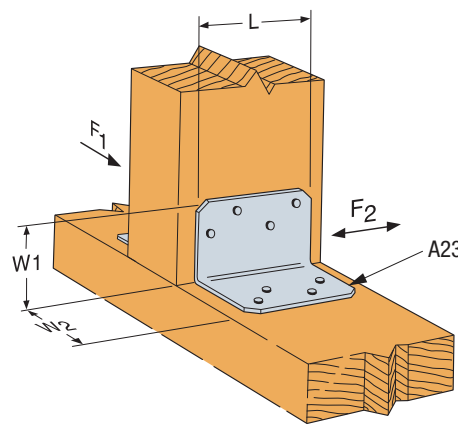
Installation

- Use all specified fasteners

Construction Details



A21 Angle Bracket Installation



A23 Angle Bracket Installation

A21 and A23 Technical Data

Model No.	Dimensions (mm)		Fasteners (No. – Length x Dia., mm)		Country	Design Capacity (kN)	
	W1	W2	Base	Post		F1 ⁵	F2
A21	50	40	2 – 38 x 3.75	2 – 38 x 3.75	AU	k _i = 1.14 1.03	k _i = 1.14 0.43
					NZ	k _i = 1.0 0.97	k _i = 1.0 0.41
A23	50	40	4 – 38 x 3.75	4 – 38 x 3.75	AU	k _i = 1.14 1.33	k _i = 1.14 1.77
					NZ	k _i = 1.0 1.33	k _i = 1.0 1.66

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (ϕ), and applicable the k modification factors following AS 1720.1 and NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
2. For Australia, the Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (ϕ) is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k_i) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
4. Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. Connectors are required on both sides to achieve F1 loads in both directions.
6. For simultaneous loads in more than one direction, the connector must be evaluated using the Unity Equation. See General Note 'e' on page 15.