

E5 — Reinforced Angle Bracket

Material: Carbon Steel & 316 Stainless Steel 1.5mm thick

Finish:

Z275 Galvanised: E5



316 Stainless Steel: E5SS



Size: See illustration on the right

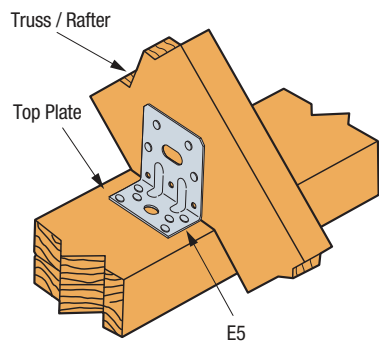
Features & Benefits

- Removes the guesswork for making perfectly square connections
- Reinforces 90-degree connections
- Two anchor holes for extra strength in required applications
- Heavily swaged without any welding during the manufacturing process gives it extra strength
- Easy to install for right-angled corner joints reinforcement
- The E5SS is ideal for Deck Joist Fixing combined with Simpson Strong-Tie's DTT Tension Tie & Holdown
- Available in 316 Stainless Steel for outdoor structures and more corrosive environments such as coastal areas

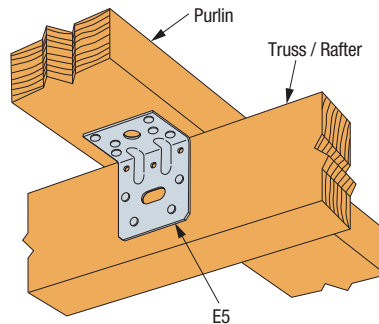
Installation

- Use all specified fasteners.
- Simpson Strong-Tie Stainless Steel connectors require stainless steel fasteners

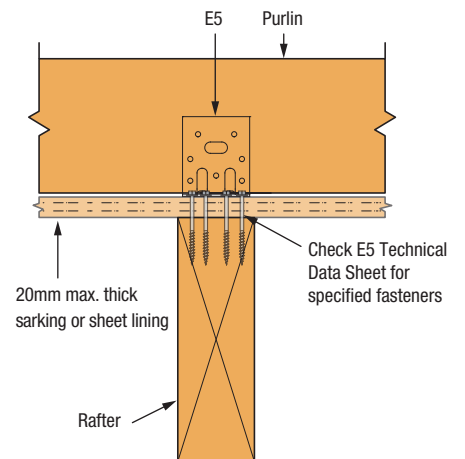
Construction Details



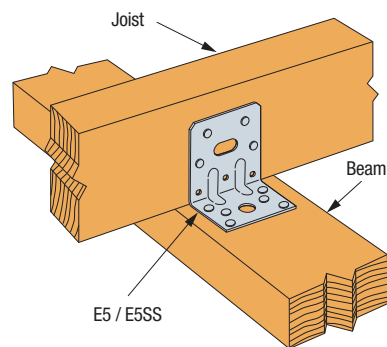
E5 Rafter/Truss-to-Top Plate



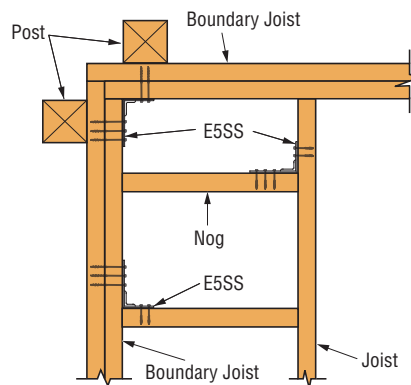
E5 Purlin-to-Truss/Rafter



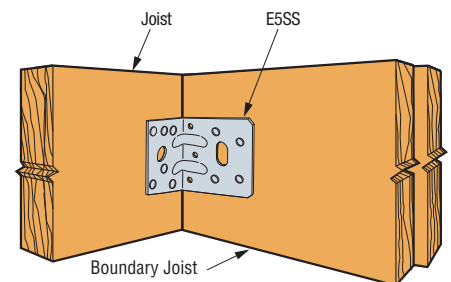
E5 Purlin-to-Rafter Sarked Roof - Cross Section



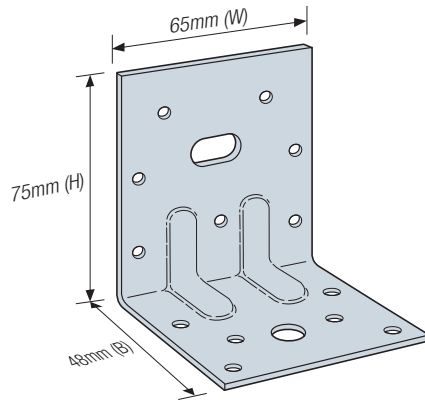
E5 Beam Connection



E5SS Deck Joist Fixing - Plan View

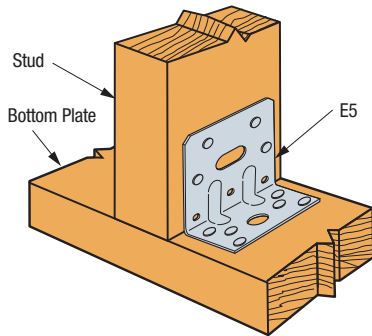


E5SS Deck Joist Fixing

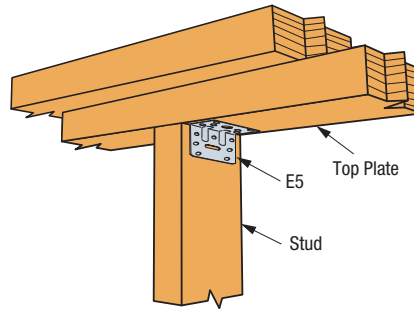


E5 / E5SS

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E5 Stud-to-Bottom Plate



E5 Stud-to-Top Plate

E5 Technical Data

Model No.	Dimensions (mm)			Fasteners (No. - Length x Dia., mm)		Design Capacity $N_{d,i}$ (kN)	
	H	W	B	Top Plate	Truss/Rafter	Australia	New Zealand
				Uplift ($k_1 = 1.14$)		Uplift ($k_1 = 1.0$)	
E5	75	65	48	6 – SD#10 x 64mm	7 – SD#10 x 38mm	4.1	2.96
				6 – SD#10 x 64mm	7 – 38 x 3.75mm	4.1	2.96
E5SS				6 – CSA5.0X40S	7 – CSA5.0X40S	3.2	2.31
				6 – CSA5.0X40S	7 – 38 x 3.75mm SS	3.1	2.20

- 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 3.2 mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
- 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 and 0.7 for other types of fasteners.
- Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor (k_1) where applicable. Capacities may not be increased.
- 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.
- Simpson Strong-Tie stainless-steel connectors require stainless-steel fasteners.