## Post Bases and Post Caps



### **ABU** Adjustable Post Base

The ABU adjustable post base provides a high-strength connection between the post and concrete. Designed to install on hardened concrete with either a cast-in-place or post-installed anchor, the ABU is designed to provide maximum uplift performance for areas where uplift from high winds is a concern.

- The slotted base enables flexible positioning around the anchor bolt, making precise post placement easier.
- The 25mm standoff meets code requirements and helps prevent rot at the end of the post in applications where weather or moisture are present.
- ZMAX<sup>™</sup> galvanisation offers extra corrosion resistance for exterior and preservative-treated timber applications.
- The post can be fastened with either nail, bolts or Strong-Drive® SD Connector screws.

Material: See table on next page.

Finish: Galvanised—ZMAX® coating; ABU44SS, ABU66SS-stainless steel. See Corrosion Information

#### Installation

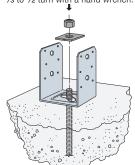
- Use all specified fasteners. See General Notes.
- See Anchoring and Fastening Systems for Concrete and Masonry for retrofit anchor options or reference technical bulletin T-ANCHORSPEC.
- Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended for non-top supported installations (such as fences or unbraced carports).

#### Typical Installation

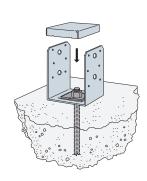
STEP 1: Install anchor bolt.



STEP 2: Position the ABU, load transfer plate, and nut on the anchor bolt. Then finger tighten the nut, plus 1/3 to 1/2 turn with a hand wrench.

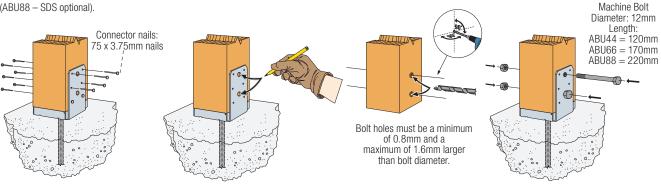


STEP 3: Place the standoff base and then the post in the ABU.



OPTION 1: Fasten using nails or Strong-Drive SD Connector screws (ABU88 - SDS optional).

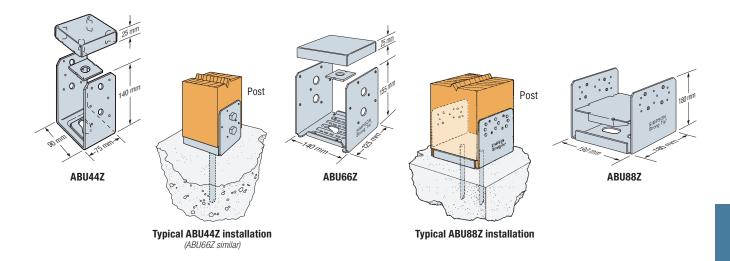
**OPTION 2:** Fasten using machine bolts.





# Post Bases and Post Caps





#### **ABU Technical Data**

Model No.	Post Size (mm)	Material (mm)		Dimensions (mm)				Fasteners				Design Capacity (kN)			
		Base	Strap					Anchor	Nails	Bolts	Country	Uplift		Download10	
		Thickness	Thickness	W	L	Н	HB <sup>9</sup>	Dia (mm)	(No. – Length x Dia., mm)	(No. – Dia., mm)		Nails	Bolts	Floor	Roof
ABU44Z	90 x 90	1.6	2.7	90	75	140	45	16	12 – 75 x 3.75	2 – M12	AU	$k_1 = 1.14$	$k_1 = 1.14$	$k_1 = 0.69$	$k_1 = 0.77$
												10.23	8.66	36.20	36.20
											NZ	$k_1 = 1.0$	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
												10.23	8.66	34.07	34.07
ABU66Z	140 x 140	2.7	3.5	140	125	155	45	16	12 – 75 x 3.75	2 – M12	AU	$k_1 = 1.14$	$k_1 = 1.14$	$k_1 = 0.69$	$k_1 = 0.77$
												7.15	8.68	70.66	70.66
											NZ	$k_1 = 1.0$	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
												6.73	7.15	66.50	66.50
ABU88Z <sup>5</sup>	200 x 200	2.0	2.7	190	180	180	_	2 – 16	18 – 75 x 3.75	_	AU	$k_1 = 1.14$	$k_1 = 1.14$	$k_1 = 0.69$	$k_1 = 0.77$
												10.36	_	129.91	129.91
											NZ	$k_1 = 1.0$	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
												9.75	_	122.27	122.27
ABU44SS	90 x 90	1.6	2.7	90	75	140	45	16	12 – 75 x 3.75	2 – M12	AU	$k_1 = 1.14$	$k_1 = 1.14$	$k_1 = 0.69$	$k_1 = 0.77$
												7.05	6.48	38.74	38.74
											NZ	$k_1 = 1.0$	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
												6.64	6.48	36.46	36.46
ABU66SS	140 x 140	2.7	3.5	140	125	155	45	16	12 – 75 x 3.75	2 – M12	AU	$k_1 = 1.14$	$k_1 = 1.14$	$k_1 = 0.69$	$k_1 = 0.77$
												11.15	11.81	68.89	68.89
											NZ	$k_1 = 1.0$	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
												10.96	11.81	64.84	64.84

- 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. For Australia, the Capacity Factor (\$\phi\$) 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 (\$\phi\$) is 0.80 for nails in lateral load and 0.70 for other fasteners.
- Duration of Load Factor (k<sub>1</sub>) is as shown. Reduce Duration of Load Factor 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.
- ABU88Z may alternately be installed with eight Simpson Strong-Tie SDS 6.4 x 76mm Heavy-Duty Connector screws (sold separately) to achieve table loads.
- Specifier to design concrete for uplift capacity.
- Structural composite timber columns have sides that either show the wide face or the edges of the timber strands/veneers, known as the narrow face. Fasteners should be installed in the wide face.
- Simpson Strong-Tie stainless-steel connectors require stainless-steel fasteners.
- HB dimension is the distance from the bottom of the post up to the first bolt hole.
- 10. Downloads shall be reduced where limited by the capacity of the timber post.