

CPT – Concealed Post Base Tie

Material: CPTZ - Carbon Steel; CPTSS - 316 Stainless Steel
2.7mm thick (base), 3.5mm thick (knife plate)

Finish: Knife plate, washers and standoff base are ZMAX® Galvanised. The standoff base has an additional textured, flat Black Powder Coat finish for aesthetic purposes. The ½" (12.7mm) diameter drift dowels are Mechanically Galvanised. If substituting M12 diameter bolts, a Hot Dip Galvanised finish is recommended

ZMAX® Galvanised: CPTZ



316 Stainless Steel: CPTSS

Size: See illustration on the right and table below

Features & Benefits

- Manufactured in heavier gauge steel for a stronger connection
- The post support blade can be used as a template for location to drill dowel holes
- Black powder coated base for a modern appearance
- Tested and load-rated engineering data available
- Suitable for Glulam and solid sawn timber
- It can be installed with either mechanical or chemical anchors (dependant on engineering specifications)
- Available in a range of sizes to suit 90mm, 115mm, 140mm and 190mm posts
- The 90 mm size is also available in 316 Stainless Steel for for more corrosive environments such as coastal areas
- All pins and fasteners needed for installation are included

Installation

- Use all specified fasteners.
- Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended for non-braced or non-top-supported installations

Construction Details

CPT Technical Data

Model No.	Post Size (mm) W x H	Dimensions (mm)		Material (mm)		Fasteners				Design Capacity (kN)				
		W	L	Base Thickness	Knife Plate Thickness	Anchor		Dowel		Uplift k _i = 1.14	Download		F1 k _i = 1.14	F2 k _i = 1.14
						Qty	Dia. (mm)	Qty	Dia. x L		Floor k _i = 0.69	Roof k _i = 0.77		
CPT90Z	90 x 90 100 x 100	89	89	2.7	3.5	2	12	3	½" (12.7mm) x 70mm	13.5	47.5	53.0	2.7	3.4
CPT115Z	115 x 115	114	114							13.5	61.1	61.1	2.7	3.8
CPT140Z	140 x 140 152 x 152	137	137							20.4	109	109	2.9	4.6
CPT200Z	190 x 190 203 x 203	184	184							17.5	114	114	3.3	4.8
CPT90SS ⁶	90 x 90 100 x 100	89	89							12.7	47.5	53.0	2.3	3.6

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, and applicable the k modification factors following AS 1720.1 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. 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.
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.
5. CPTZs are supplied with three ½ inch diameter steel dowels. Alternate 12 mm diameter hex or square head machine bolts may be substituted and will achieve table loads.
6. CPTSS are supplied with three ½ inch diameter stainless steel dowels.
7. Lag or carriage bolts are not permitted.
8. 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. Values in the table reflect installation into the wide face.
9. Downloads shall be reduced where limited by the capacity of the timber post.

