# **CPT** — Concealed Post Base Tie



**CPT90Z Components** 

Post

Dowels

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 1/2" (12.7mm) diameter drift dowels are Mechanically Galvanised. If substituting M12 diameter bolts, a Hot Dip Galvanised finish is recommended

ZMAX® Galvanised: CPTZ

Corrosion Resistance Level MEDIUM Corrosion Resistance Level SEVERE

316 Stainless Steel: CPTSS

Size: See illustration on the right and table below

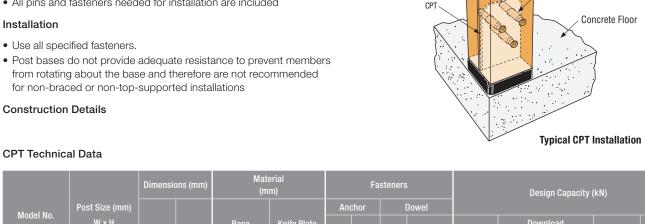
#### Features & Benefits

- 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

- Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended

## **Construction Details**



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						
							Dia. (mm)	Qty	Dia. x L	Uplift k <sub>1</sub> = 1.14	Download		F1	F2
						Qty					Floor k <sub>1</sub> = 0.69	Roof k <sub>1</sub> = 0.77	k <sub>1</sub> = 1.14	$k_1 = 1.14$
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 <sup>6</sup>	90 x 90 100 x 100	89	89							12.7	47.5	53.0	2.3	3.6

- 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.
- 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.
- 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.

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CPT90Z

(others similar)

- 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.
- CPTSS are supplied with three ½ inch diameter stainless steel dowels
- Lag or carriage bolts are not permitted.
- 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.
- Downloads shall be reduced where limited by the capacity of the timber post