

Together we're helping
build safer, stronger
structures.



Expose the natural **Beauty** of timber with the **Strength** of steel

Our range of concealed connectors are all you need to maintain structural integrity, while hiding your connections from base to beam.

Key Features:

- Simpson Strong-Tie makes life easier for installers by providing all the necessary components in one box.
- ZMAX® galvanisation gives additional corrosion protection in outdoor or treated timber applications.
- Tested and load-rated engineering data available.
- Suitable for Glulam and solid sawn timber.

Simpson Strong-Tie® Australia
Call **1300 STRONGTIE** (1300 787664)
strongtie.com.au



Stainless Steel version pictured

CPT Concealed Post Base



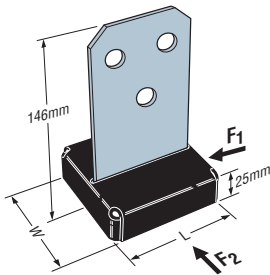
Provides a clean look with a 25 mm standoff

Reduce the potential of timber decay at the post end with a 25 mm standoff. Available in a range of sizes to suit 90 mm, 140 mm and 190 mm posts.

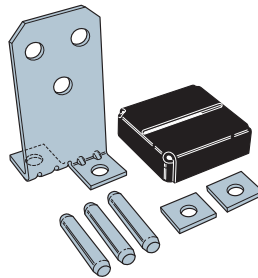
CPT can be installed with either mechanical or chemical anchors (dependant on engineering specifications).

The 90 mm size is also available in 316 Stainless Steel for environments where added corrosion protection is required.

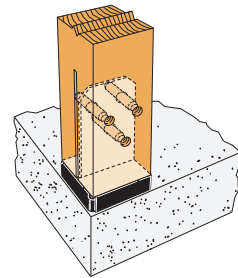
- The post support blade can be used as a template for location to drill dowel holes
- Black powder coated base for a modern appearance (ZMAX® versions)
- 316 Stainless Steel 90 mm version also available (CPT90SS)



CPT90Z
(others similar)



CPT90Z components
(others similar)



Typical CPT90Z installation

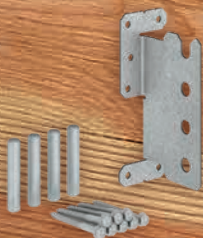
Product and Technical Data

Model No.	Post Size (mm)	Material (mm)		Dimensions (mm)		Fasteners			Design Capacity (kN)					
		Base Thickness	Knife Plate Thickness	W	L	Anchor		Dowel	Uplift $k_t = 1.14$	Download		F1 $k_t = 1.14$	F2 $k_t = 1.14$	
						Qty	Dia. (mm)			Qty	Floor $k_t = 0.69$			Roof $k_t = 0.77$
CPT90Z	90 x 90	2.7	3.5	90	90	2	12	3	1/2" (12.5mm) x 70mm	13.5	47.5	53.0	2.7	3.4
CPT140Z	140 x 140			137	137				1/2" (12.5mm) x 120mm	20.4	109	109	2.9	4.6
CPT200Z	190 x 190			184	184				1/2" (12.5mm) x 70mm	17.5	114	114	3.3	4.8
CPT90SS ⁶	90 x 90			90	90				1/2" (12.5mm) x 70mm	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 (ϕ), and applicable the k modification factors following AS 1720.1 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.
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.
3. Duration of Load Factor (k_t) is as shown. Reduce Duration of Load Factor (k_t) 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. CPTZ are supplied with three 1/2" (12.5 mm) diameter steel dowels. Alternate 12 mm diameter hex or machine bolts may be substituted and will achieve table loads.
6. CPTSS are supplied with three 1/2" (12.5 mm) diameter stainless steel dowels.
7. Lag or carriage bolts are not permitted.
8. Structural composite lumber columns have sides that either show the wide face or the edges of the lumber 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.

CJT Concealed Joist Tie



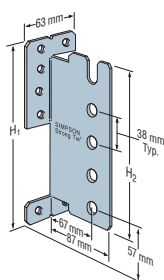
Hidden look with flexible installation

The CJT concealed joist tie can be installed in two ways: either routed out the header or the end of the joist for a concealed connection.

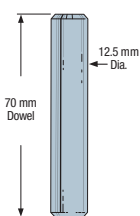
Ensure the routing is deep enough to allow for the screws heads to achieve a concealed finish.

- Joists can be sloped up to 45° angle with full table loads.
- This connector can be used for end of header joists or corner connections.

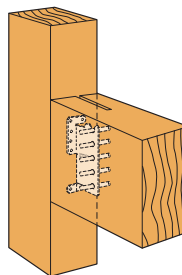
CJT4ZS pictured



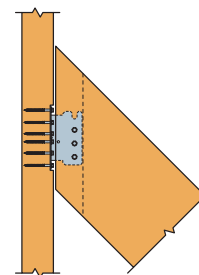
CJT5ZS
(Others similar)



Chamfered steel dowel
(Galvanised)



Typical CJT installation
(Note that dowels should be centred within beam)



CJT sloped view

Product and Technical Data

Model No.	Joist Size (mm)	Dimensions (mm)	Fasteners			Design Capacity (kN)		
			H ₁	Post/Header (No. – Dia. x Length, mm)	Dowel	Uplift k ₁ = 1.14	Download	
Qty	Dia. x L	Floor k ₁ = 0.69	Roof k ₁ = 0.77					
CJT3ZS	140 x 90	141	6 – SDS6.4 x 76	3	½" (12.5mm) x 70mm	7.1	6.9	6.9
	185 x 90					8.2	8.4	8.4
CJT4ZS	235 x 90	178	8 – SDS6.4 x 76	4	½" (12.5mm) x 70mm	13.2	13.2	13.2
CJT5ZS	286 x 90	217	10 – SDS6.4 x 76	5		18.9	19.1	19.1

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor (ϕ), and applicable the k modification factors following AS 1720.1 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.
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.

3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor (k_1) 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. Centre dowel in beam. Short dowel (½" (12.5 mm) x 70 mm) for use with a timber member with a breadth of 90 mm, otherwise use the long dowel (½" (12.5 mm) x 120 mm)

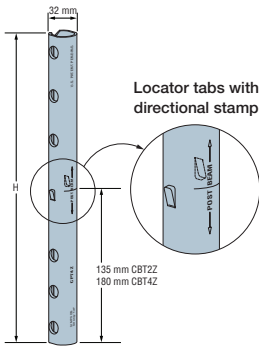
CBT Concealed Beam Tie



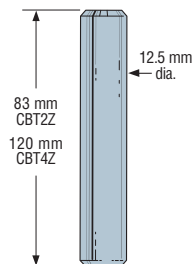
Combines structural strength with invisibility

CBT, the newest addition to the concealed structural connector range, combines structural strength with invisibility. Designed to connect horizontal beams atop a vertical post, the CBT continues the structural load path into the foundation through the CPT. The cylindrical design allows installations with a common drill bit. The CBT is available in two models designed to connect beams and posts of a variety of sizes.

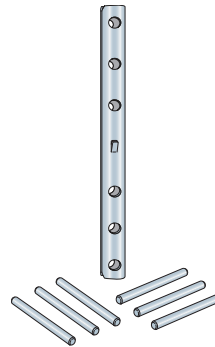
- Flattened sides enable installer to lay part on beam or post to mark where holes need to be drilled.
- Locator tabs provide proper dimensional layout of dowel pin holes
- Clear markings distinguish which end installs into the post and which goes into the beam to help reduce installer error.



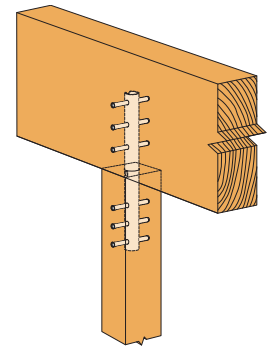
CBT4Z
(CBT2Z similar)



Chamfered steel dowel
(Galvanised)



CBT4Z components
(others similar)



Typical CBT4Z installation

Product and Technical Data

Model No.	Post Size Min. (mm)	Beam Size Min. (mm)	Dimensions (mm)		Dowel		Design Capacity (kN)						
			D	H	Qty		Dia. x L	Download		Continuous Beam		End of Beam	
					Post	Beam		Roof $k_1 = 0.77$	Floor $k_1 = 0.69$	Uplift $k_1 = 1.14$	Lateral $k_1 = 1.14$	Uplift $k_1 = 1.14$	Lateral $k_1 = 1.14$
CBT2Z-KT	90 x 90	140 x 90	32	254	2	2	½" (12.5mm) x 83mm	47.8	42.9	19.3	4.3	10.1	3.5
CBT4Z-KT	140 x 140	190 x 140	32	356	3	3	½" (12.5mm) x 120mm	123.1	110.3	24.5	9.8	23.4	7.0

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor (ϕ), and applicable the k modification factors following AS 1720.1 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.
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.
3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor (k_1) 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. Lateral loads is in the direction parallel to the beam.
6. Lag or carriage bolts are not permitted.
7. Structural composite timber columns have sides that show either the wide faces or the edges of the timber strands/veneers. Values in the table reflect dowel installation into the wide face.
8. Spliced condition must be detailed by Designer.
9. Downloads shall be reduced where limited by the capacity of the timber post.