CBT — Concealed Beam Tie

Material: Carbon Steel 2.7mm thick

Finish: ZMAX® Galvanised

Corrosion Resistance Level MEDIUM

Size: See illustration on the right and table below

Features & Benefits

- · Manufactured in heavier gauge steel for a stronger connection
- 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
- Tested and load-rated engineering data available
- Suitable for Glulam and solid sawn timber
- Required dowel pins included

Installation

• Use all specified fasteners

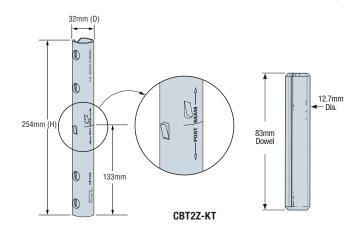
Beam

Post

- The CBT2Z requires a minimum 140mm deep beam
- The CBT2Z Kit comes complete with 83mm dowels

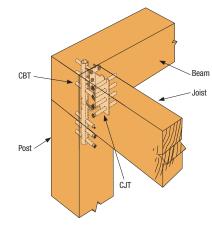
Lateral

Construction Details



SIMPSON

Strong-Tie



CBT & CJT Concealed Corner Installation

Spliced condition must be detailed by Designer

10. Loads shall be reduced where limited by the capacity of the timber post.

CBT2Z Beam-to-Post Installation

CBT2Z-KT

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CBT Technical Data

	Model No.	Post Size Min. (mm)	Beam Size Min. (mm)	Dimensions (mm)		Dowel			Design Capacity (kN)				
I				D	н	Qty			Continuous Beam		End of Beam		
						Post	Beam	Dia. x L	Uplift k ₁ = 1.0	Lateral k ₁ = 1.0	Uplift k ₁ = 1.0	Lateral k ₁ = 1.0	
	CBT2Z-KT	90 x 90	140 x 90	32	254	2	2	1⁄2" (12.5mm) x 83mm	13.9	3.1	7.3	2.5	
1.	Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor (ϕ) or the NZ Strength Reduction Factor (ϕ), and applicable the k, modification factors following AS 1720.1 or NZS3603 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.							 Factor (k,) 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. Or NZ Joint Group J5 as per NZS3603 Table 4.1. Lateral loads is in the direction parallel to the beam. Lag or carriage bolts are not permitted. 					
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.						8. S [.] th in	 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. 					

9.

values where other Category applications govern. For NZ, the Strength Reduction Factor (Ø) is 0.7 for 'other З.

Duration of Load Factor (k₁) is as shown. Reduce Duration of Load

Simpson Strong-Tie® (New Zealand) Ltd Call 09 477 4440 www.strongtie.co.nz

This flyer reflects information available as of December 1, 2019 and may be updated periodically. Please visit our website for current information and limited warranty.