



Keep It Hidden

New CBTZ
Concealed Beam Tie



(800) 999-5099
www.strongtie.com

New CBTZ Concealed Beam Tie Provides Clean Look for Beam-to-Post Connections

The new CBTZ Concealed Beam Tie combines structural strength with invisibility for applications that call for concealed joinery rather than standard beam-to-post connections. Whether you're designing for a custom indoor or outdoor living space, the tubular shape of the CBTZ allows an easy-to-install beam-to-post connection using common tools.

The CBTZ is designed to connect beams and posts of a variety of sizes. The CBT2Z accommodates a minimum 4x4 post and 4x6 beam using four steel dowel pins (included) for installation. The CBT4Z fits a minimum 6x6 post and 6x8 beam using six dowel pins (included). Each model will still achieve the listed load capacities even when installed in wood members greater than the minimum stated sizes.

Additional Features

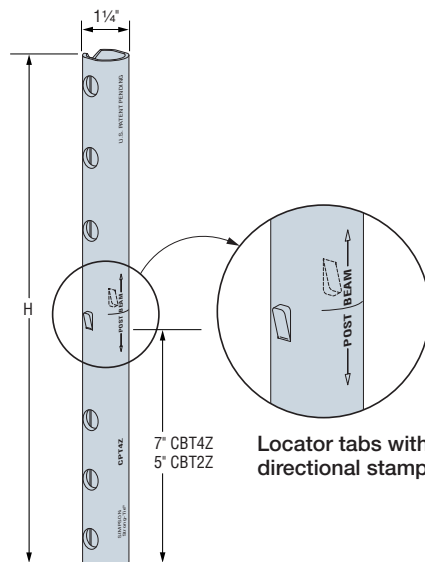
- Flattened sides enable installer to lay part on beam or post to mark where holes need to be drilled.
- Locator tabs provide proper dimensional layout of dowel pin holes.
- Clear markings distinguish which end installs into the post and which goes into the beam to help reduce installer error.
- ZMAX® galvanization gives additional corrosion protection in outdoor or preservative-treated wood applications.



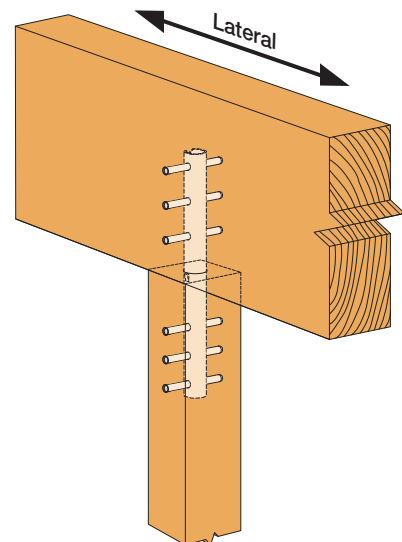
CBT4Z
(Patent Pending)

Model No.	Post (min.)	Beam (min.)	Dimensions (in.)		Fasteners			Allowable Loads (lbs.) – DF/SP					
			Dia.	H	Qty.		Type	Continuous Beam			End of Beam		
					Post	Beam		Uplift (160)	Lateral (160)	Down (100)	Uplift (160)	Lateral (160)	Down (100)
CBT2Z	4x4	4x6	1 1/4	10	2	2	1/2" x 3 1/4" dowel pin 1/2" MB	2,020	750	6,890	1,585	550	6,890
CBT4Z	6x6	6x8	1 1/4	14	3	3	1/2" x 4 3/4" dowel pin 1/2" MB	4,215	1,655	18,140	3,695	1,055	18,140

1. Uplift and lateral loads have been increased for wind or earthquake with no further increase allowed; reduce where other loads govern.
2. Lateral load is in the direction parallel to the beam.
3. Alternate 1/2"-diameter hex or square head machine bolts may be used for loads listed.
4. Lag or carriage bolts are not permitted.
5. Structural composite lumber columns have sides that show either the wide face or the edges of the lumber strands/veneers. Values in the tables reflect dowel or bolt installation into the wide face. See technical bulletin T-C-SCLCLM for load reductions due to narrow-face installation.
6. Spliced condition must be detailed by Designer.

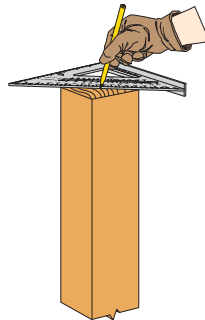


CBT4Z
(CBT2Z similar)

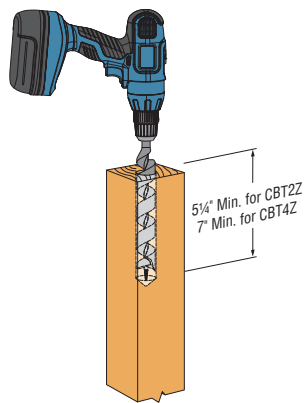


Typical CBT4Z Installation

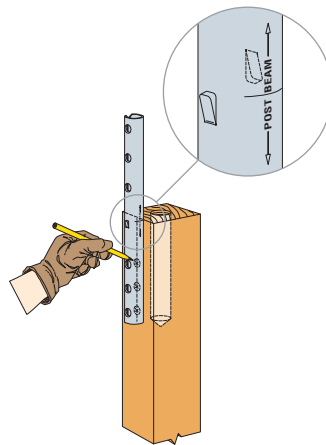
Installing the CBTZ into the Post



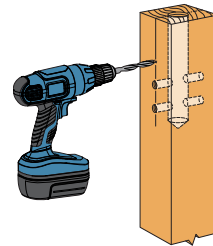
1. On a squared-off post, mark the center of the top of the post.



2. Using a 1 1/4" auger bit and square, drill a 1 1/4"-diameter hole into the end of the post at the center mark. Drill the hole a minimum of 5 1/4" deep for the CBT2Z (7" for CBT4Z).



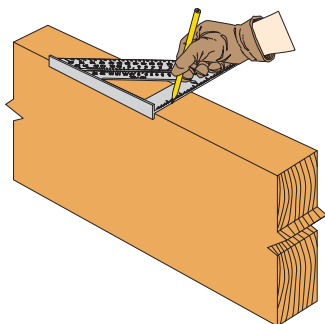
3. Draw a center line of the 1 1/4" hole on the outside of the post (confirm straightness by placing CBTZ into hole and make adjustments to the center line as necessary). For the POST end of the CBTZ, use the provided template, tape measure or the CBTZ (using the aid of the locator tab for the POST end of the CBTZ) to mark the center of the dowel pin holes of the CBTZ on the center line.



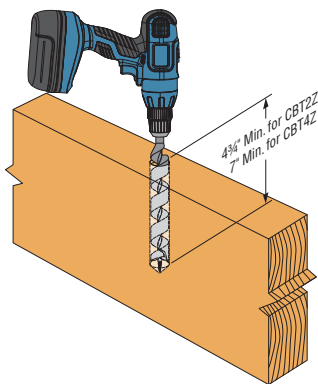
4. Using a square, drill 1/2" holes through the post for the dowel pins. Place a scrap piece of wood on the back side to minimize wood splintering.

Check to see if post is plumb and make adjustments as necessary. CBTZ may be 5° from vertical and still achieve published loads.

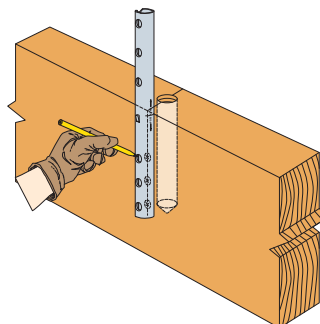
Installing the CBTZ into the Beam



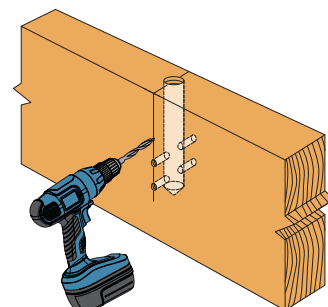
5. Mark the center of the beam where the beam will be bearing on the post.



6. Using a 1 1/4" auger bit and square, drill a 1 1/4"-diameter hole into the bottom of the beam at the center mark. (If the CBTZ is not plumb from the post installation, place the CBTZ into the post and use as a layout for drilling the hole into the beam). Drill the hole a minimum of 4 3/4" deep for the CBT2Z (7" for CBT4Z).



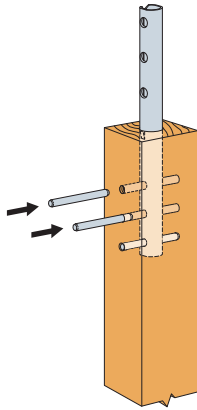
7. Draw a center line of the 1 1/4" hole on the outside of the beam (confirm straightness by placing CBTZ into hole and make adjustments to the center line as necessary). For the BEAM end of the CBTZ, use the provided template, tape measure or CBTZ (using the aid of the locator tab for the BEAM end of the CBTZ) to mark the center of the dowel pin holes of the CBTZ on the center line.



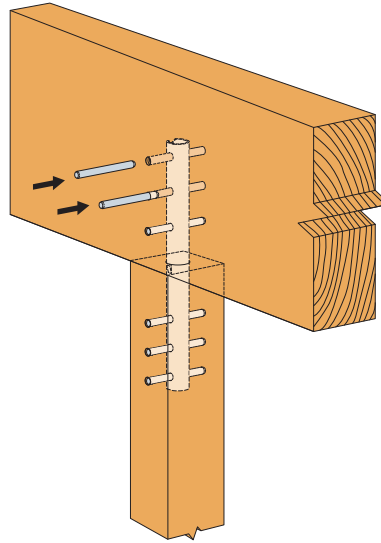
8. Using a square, drill 1/2" holes through the beam for the dowel pins. Place a scrap piece of wood on the back side to minimize wood splintering.

Instructions continued on next page.

Final Assembly



9. Insert POST end of the CBTZ into post to the embedment line and install pins.



10. Place beam onto CBTZ and install pins. Verify ends of pins are equal distances from the outside edge of the post and beam. Fill or plug holes as desired.

Keep It Hidden from Top to Bottom

From the base to the beam, the availability of the CBTZ now means that Simpson Strong-Tie has all the connectors you need to maintain structural integrity while concealing your connections and providing a more aesthetic look. The CPTZ concealed post base features a knife-plate connection with 1" standoff that reduces potential for decay while satisfying code requirements related to weather, water splash and basements. The CJT concealed joist tie, like the CPTZ, features a knife-plate and dowel connection, and it can be installed in three different ways: with no routing of header/post or beam, with a routed header or post, or with a routed beam. More information is available about these products at www.strongtie.com.

