

CPTZ Concealed Post Tie



The CPTZ concealed post base provides a clean, concealed look while providing a 1" standoff height above concrete. The 1" standoff reduces the potential for decay at the post end and satisfies code requirements for posts that are exposed to weather, water splash or in basements.

- The CPTZ is tested and load-rated for uplift, download and lateral load.
- Simpson Strong-Tie saves installers time by providing all the necessary components to make the connection in one box.
- The CPTZ anchorage can either be cast-in-place or retrofitted with adhesive or mechanical anchors.
- Solutions have been calculated per ACI 318, Appendix D to determine their allowable load in different concrete configurations.

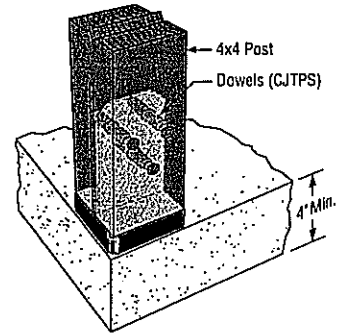
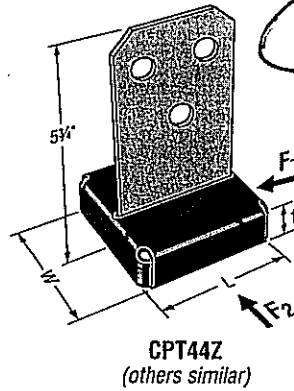
MATERIAL: See table below

FINISH: Knife plate, washers and standoff base are ZMAX®-galvanized steel. The standoff base has an additional textured, flat black powder coat finish for aesthetic purposes. The 1/2" diameter drift dowels are mechanically galvanized in accordance with ASTM B695, class 55. If substituting 1/2" diameter machine bolts, a hot-dip galvanized finish is recommended.

INSTALLATION: • Use all specified fasteners. See General Notes.

- More extensive installation instructions are available through our Literature Library app or by visiting www.strongtie.com.
- 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.

CODES: See page 12 for Code Reference Key Chart.



Typical CPT44Z Installation

Caps & Bases

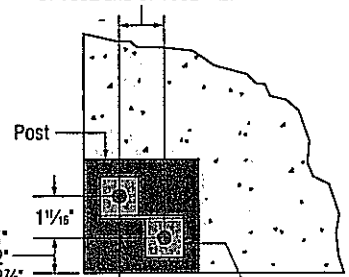
These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Model No.	Post Size	Base (Ga)	Knife Plate (Ga)	Dimensions (in.)		Fasteners				Allowable Loads (DF/SP)				Code Ref.
				W	L	Anchor		Post		Uplift (100)	Down (100)	F ₁ (160)	F ₂ (160)	
						Qty.	Dia.	Qty.	Type*					
CPT44Z	4x4, RGH 4x4	12	10	3 1/2	3 1/2	2	1/2	3	1/2 x 2 3/4 dowel	3035	11455	600	605	13, F1
									1/2" MB	3350				
CPT66Z	6x6, RGH 6x6	12	10	5 3/4	5 3/4	2	1/2	3	1/2 x 4 3/4 dowel	4430	21375	655	1025	
									1/2" MB	4475				
CPT88Z	8x8, RGH 8x8	12	10	7 1/4	7 1/4	2	1/2	3	1/2 x 4 3/4 dowel	3625	22805	740	1080	
									1/2" MB	4475				

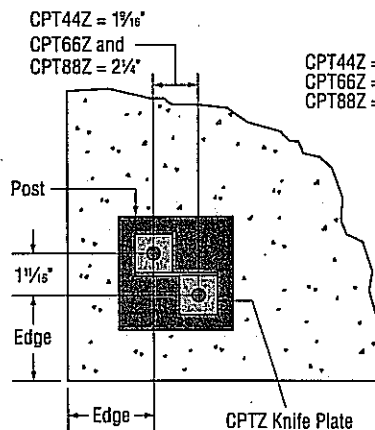
1. Uplift loads have been increased for wind or earthquake load with no further increase allowed; reduce where other loads govern.
2. Downloads may not be increased for short-term loading and shall not exceed the post capacity. See pages 245-246 for common post capacities.
3. CPTZs are supplied with (3) 1/2" diameter dowel pins.

4. 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.

CPT44Z = 1 1/16"
CPT66Z and CPT88Z = 2 1/4"



Corner Flush Edge



Corner Near Edge
(Away from edge similar)

CPTZ Anchorage Using SET-XP® Anchoring Adhesive

Model No.	Embed (in.)	Edge Distance (in.)	Allowable Uplift		
			Anchor	Cracked	CPTZ
Corner - Flush Edge					
CPT44Z	2 1/4	—	505	405	3035
CPT66Z	2 1/4	—	580	465	4430
CPT88Z	2 1/4	—	625	500	3625
Corner - Near Edge					
CPT44Z	5	4	1480	1185	3035
CPT66Z	5	5	2025	1620	4430
CPT88Z	5	6	2430	1945	3625
Corner - Away from Edge					
CPT44Z	6	9	4005	3205	3035
CPT66Z	7 1/2	11 1/4	5440	4350	4430
CPT88Z	7 1/2	11 1/4	5440	4350	3625
10" Diameter Circular Pedestal					
CPT44Z	5	4	1560	1245	3035
CPT66Z	5	3 3/4	1460	1165	4430
12" Diameter Circular Pedestal					
CPT44Z	5	5	2025	1620	3035
CPT66Z	5	4 3/4	1935	1550	4430
CPT88Z	5	4 3/4	1935	1550	3625

1. Allowable uplift loads are calculated per ACI 318-11, Appendix D considering cracked and uncracked concrete and are qualified for Wind and Seismic Design Categories A & B. No further increases allowed.
2. Edge distance is measured from the center line of the nearest anchor bolt to the edge of concrete.
3. Foundation dimensions are for anchorage only. Foundation design by others. Refer to ACI318-11.
4. Lateral loads (F₁ = F₂) for Corner - Flush Edge conditions are CPT44Z = 395 lbs., CPT66Z = 570 lbs., CPT88Z = 740 lbs. For all other installations using CPTZ with SET-XP® anchoring adhesive, use the allowable loads from the CPTZ table above.
5. Concrete shall have a minimum compressive strength, f_c = 2500 psi.