

**MPBZ™**

**Moment Post Base**

The patent-pending MPBZ is specifically designed to provide moment resistance for columns or posts. An innovative overlapping sleeve design encapsulates the post, helping to resist rotation around its base. It is available for 4x4, 6x6 and 8x8 posts. The MPBZ is ideal for outdoor structures, such as carports, fences and decks. Built-in stand-off tabs provide the required 1" stand-off to resist decay of the post while eliminating multiple parts and assembly. Additionally, the MPBZ is available in ZMAX® as the standard finish to meet exposure conditions in many environments. For 10" stemwalls or round footings, see engineering letters, L-C-10MPBZ and L-C-MPBZ at [strongtie.com](http://strongtie.com).

**Features:**

- Internal top-of-concrete tabs
- 1" standoff tabs
- Additional holes provided to attach trim material
- Weep hole provided for water drainage

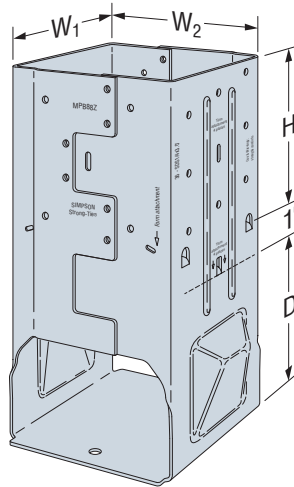
**Material:** 12 gauge

**Finish:** ZMAX coating

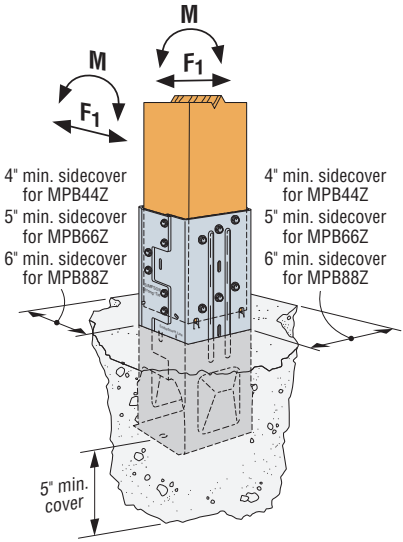
**Installation:**

- Use all specified fasteners; see General Notes.
- Install MPBZ before concrete is placed using embedment level indicators and form board attachment holes.
- Place post on tabs 1" above top of concrete.
- Install Strong-Drive® SDS Heavy-Duty Connector screws, which are supplied with the MPBZ. (Lag screws will not achieve the same load.)
- Concrete level inside the part must not exceed ¼" above embedment line to allow for water drainage.
- Annual inspection of connectors used in outdoor application is advised. If significant corrosion is apparent or suspected, then the wood, fasteners and connectors should be evaluated by a qualified engineer or inspector.

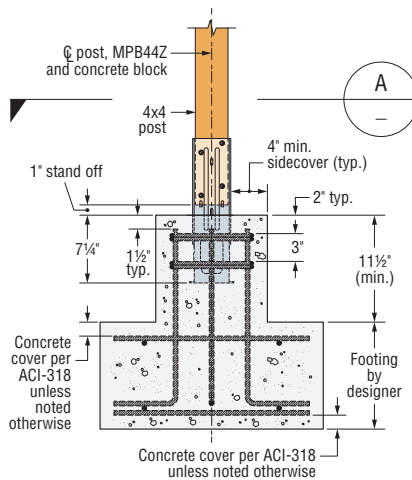
**Codes:** See p. 13 for Code Reference Key Chart



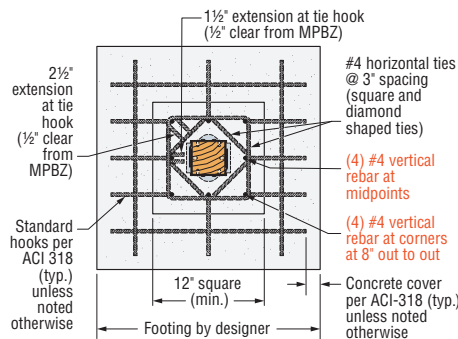
**MPB88Z**  
(MPB44Z, MPB66Z similar)  
US Patent 11,072,940



**Typical MPB66Z Nonreinforced Installation**  
(others similar)

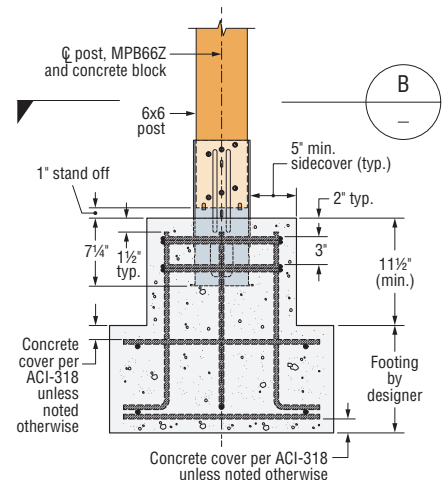


**SECTION A**

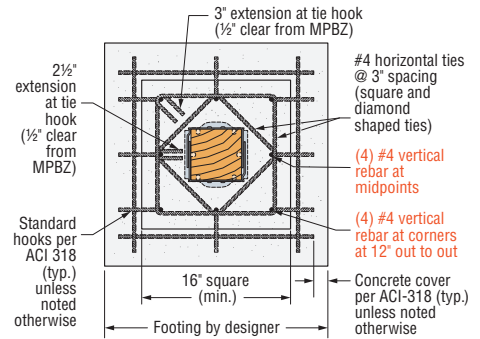


**MPB44Z Reinforced Concrete Footing**

Footing (size and reinforcement) by designer. Standard hook geometry in accordance with ACI 318 unless noted otherwise.



**SECTION B**



**MPB66Z Reinforced Concrete Footing**

Footing (size and reinforcement) by designer. Standard hook geometry in accordance with ACI 318 unless noted otherwise.

These reinforced MPBZ details are available on [strongtie.com/mpbz](http://strongtie.com/mpbz).

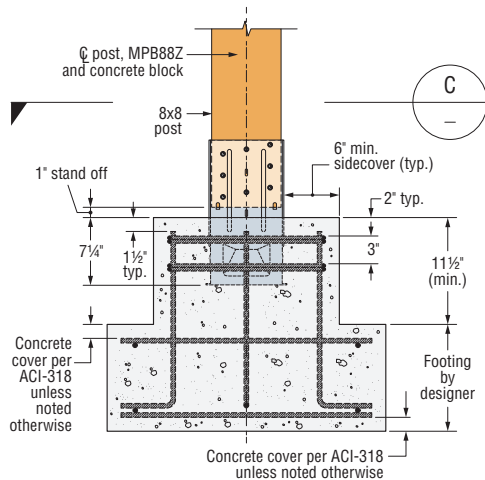
**MPBZ™**

Moment Post Base (cont.)

These products are available with additional corrosion protection. For more information, see p. 16.

Model No.	Nominal Column Size	Dimensions (in.)			Strong-Drive® SDS Screws	Concrete Allowable Loads						Wood Assembly DF/SP Allowable Loads			Rotational Stiffness (in.-lb./rad.)	Code Ref.
		W <sub>1</sub> / W <sub>2</sub>	D	H		Uplift		Lateral F <sub>1</sub>		Moment M (ft.-lb.)		Download (100)	Download (160)	Moment M (ft.-lb.) (160)		
						Uncracked	Cracked	Uncracked	Cracked	Uncracked	Cracked					
<b>Nonreinforced Concrete</b>																
<b>Wind and Seismic Design Category A&amp;B</b>																
MPB44Z	4x4	3 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(16) ¼" x 2½"	4,900	3,820	1,750	1,225	1,350	945	6,240	6,410	1,520	1,245,000	IBC®, FL, LA
MPB66Z	6x6	5 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(24) ¼" x 2½"	5,815	5,815	3,435	2,405	2,680	1,875	9,360	10,855	3,730	2,405,000	
MPB88Z	8x8	7 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(36) ¼" x 3"	11,860	9,315	7,200	5,560	4,160	2,910	15,120	17,690	4,560	5,515,000	
<b>Seismic Design Category C-F</b>																
MPB44Z	4x4	3 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(16) ¼" x 2½"	4,785	3,350	1,535	1,075	1,180	830	6,240	6,410	1,520	1,245,000	IBC, FL, LA
MPB66Z	6x6	5 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(24) ¼" x 2½"	5,815	5,815	3,015	2,110	2,055	1,645	9,360	10,855	3,730	2,405,000	
MPB88Z	8x8	7 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(36) ¼" x 3"	10,155	8,165	6,965	4,875	3,470	2,550	15,120	17,690	4,560	5,515,000	
<b>Reinforced Concrete</b>																
<b>Wind and Seismic Design Category A&amp;B</b>																
MPB44Z	4x4	3 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(16) ¼" x 2½"	4,900	3,820	1,750	1,225	1,520	1,520	6,240	6,410	1,520	1,245,000	IBC, FL, LA
MPB66Z	6x6	5 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(24) ¼" x 2½"	5,815	5,815	3,435	2,405	3,730	3,190	9,360	10,855	3,730	2,405,000	
MPB88Z	8x8	7 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(36) ¼" x 3"	11,860	9,315	7,200	5,560	4,560	4,560	15,120	17,690	4,560	5,515,000	
<b>Seismic Design Category C-F</b>																
MPB44Z	4x4	3 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(16) ¼" x 2½"	4,785	3,350	1,535	1,075	1,520	1,520	6,240	6,410	1,520	1,245,000	IBC, FL, LA
MPB66Z	6x6	5 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(24) ¼" x 2½"	5,815	5,815	3,015	2,110	3,350	2,795	9,360	10,855	3,730	2,405,000	
MPB88Z	8x8	7 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	(36) ¼" x 3"	10,155	8,165	6,965	4,875	4,560	4,560	15,120	17,690	4,560	5,515,000	

1. Loads may not be increased for duration of load.
2. Higher download can be achieved by solidly packing grout in the 1" standoff area before installation of the post. Allowable download shall be based on either the wood post design or the concrete design calculated per code.
3. Concrete shall have a minimum compressive strength of f'c = 2,500 psi.
4. Tabulated rotational stiffness accounts for the rotation of the base assembly attributable to deflection of the connector, fastener slip, and post deformation. Designer must account for additional deflection attributable to bending of the post.
5. Multiply seismic and wind ASD uplift and lateral load values by 1.43 or 1.67, respectively, to obtain LRFD capacities.
6. In accordance with IBC, Section 1613.1, detached one- and two-family dwellings in Seismic Design Category (SDC) C may use "Wind and SDC A&B" allowable loads.
7. Foundation dimensions are for anchorage only. Foundation design (size and reinforcement) by designer.
8. Allowable load shall be the lesser of the wood assembly or concrete allowable load.
9. For loading simultaneously in more than one direction, the allowable load must be evaluated using the following equation: (Design Uplift / Allowable Uplift, or Design Download / Allowable Download) + (Design Moment / Allowable Moment) + (Design Lateral / Allowable Lateral) ≤ 1.0.
10. To account for shrinkage up to 3%, multiply rotational stiffness by 0.75. Reduction may be linearly interpolated for shrinkage less than 3%.
11. Tabulated load values may be used for rough sawn lumber or larger size posts without reduction factors. Rough-size and larger-size posts shall be planed uniformly on all four sides such that centerline of post is concentric with the center line of MPBZ.



**MPB88Z**  
**Reinforced Concrete Footing**

Footing (size and reinforcement) by designer. Standard hook geometry in accordance with ACI 318 unless noted otherwise.

