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.

Features:

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

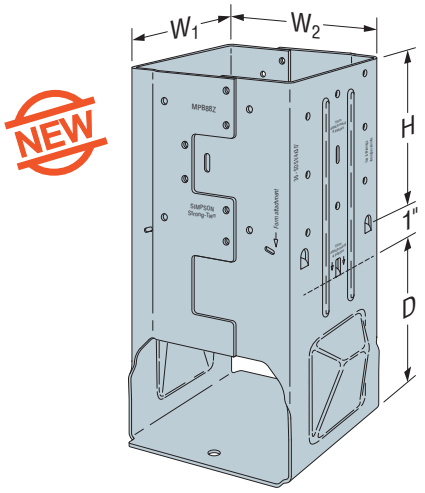
Material: 12 gauge

Finish: ZMAX coating

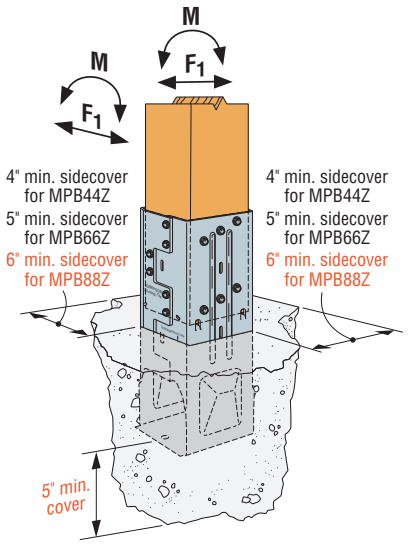
Installation:

- 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.

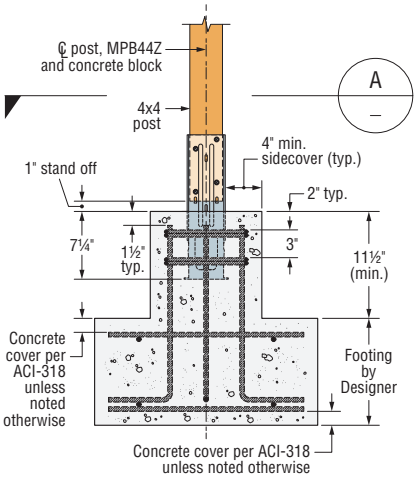
Codes: See p. 12 for Code Reference Key Chart

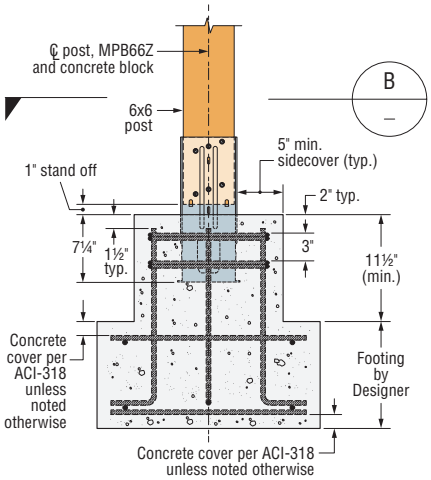


MPB88Z
(MPB44Z, MPB66Z similar)
U.S Patent Pending

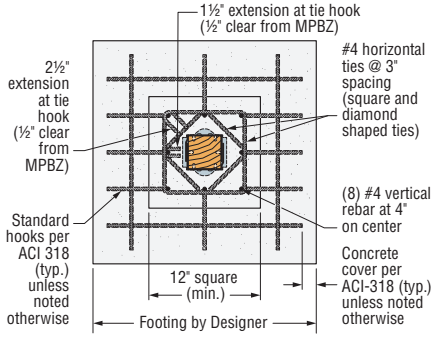


Typical MPB66Z
Non-Reinforced Installation
(others similar)

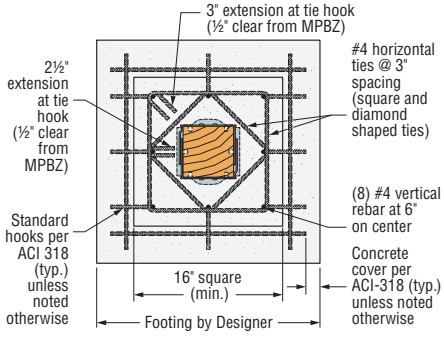




SECTION A



SECTION B



MPB44Z
Reinforced Concrete Footing
Footing (size and reinforcement) by Designer. Standard hook geometry in accordance with ACI 318 unless noted otherwise.

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**.

MPBZ

Moment Post Base (cont.)

These products are available with additional corrosion protection. For more information, see p. 15.

Model No.	Nominal Column Size	Dimensions (in.)			Strong-Drive® SDS Screws	Concrete Allowable Loads						Wood Assembly Allowable Loads (DF/SP)			Rotational Stiffness (in.-lb./rad.)	Code Ref.
						Uplift		Lateral F_1		Moment M (ft.-lb.)		Download (100)	Download (160)	Moment M (ft.-lb.) (160)		
		W_1 / W_2	D	H		Uncracked	Cracked	Uncracked	Cracked	Uncracked	Cracked					
Non-Reinforced Concrete																
Wind and Seismic Design Category A&B																
MPB44Z	4x4	3⁹⁄₁₆	7¼	7¼	(16) ¼" x 2½"	4,900	3,820	1,750	1,225	1,350	985	6,240	6,410	1,540	1,245,000	IBC, FL, LA
MPB66Z	6x6	5⁹⁄₁₆	7¼	7¼	(24) ¼" x 2½"	5,815	5,815	3,545	2,405	2,680	1,875	9,360	10,855	3,730	2,405,000	
NEW MPB88Z	8x8	7⁹⁄₁₆	7¼	7¼	(36) ¼" x 3"	9,945	6,960	7,200	5,560	4,160	2910	15,120	17,585	4,525	5,500,000	—
Seismic Design Category C–F																
MPB44Z	4x4	3⁹⁄₁₆	7¼	7¼	(16) ¼" x 2½"	4,785	3,350	1,535	1,075	1,180	830	6,240	6,410	1,540	1,245,000	IBC, FL, LA
MPB66Z	6x6	5⁹⁄₁₆	7¼	7¼	(24) ¼" x 2½"	5,815	5,815	3,015	2,055	2,055	1,645	9,360	10,855	3,730	2,405,000	
NEW MPB88Z	8x8	7⁹⁄₁₆	7¼	7¼	(36) ¼" x 3"	7,420	6,100	6,965	4,875	3,470	2550	15,120	17,585	4,525	5,500,000	—
Reinforced Concrete																
Wind and Seismic Design Category A&B																
MPB44Z	4x4	3⁹⁄₁₆	7¼	7¼	(16) ¼" x 2½"	4,900	3,820	1,750	1,225	1,540	1,540	6,240	6,410	1,540	1,245,000	
MPB66Z	6x6	5⁹⁄₁₆	7¼	7¼	(24) ¼" x 2½"	5,815	5,815	3,545	2,405	3,730	3,190	9,360	10,855	3,730	2,405,000	—
NEW MPB88Z	8x8	7⁹⁄₁₆	7¼	7¼	(36) ¼" x 3"	9,945	6,960	7,200	5,560	4,525	4,525	15,120	17,585	4,525	5,500,000	
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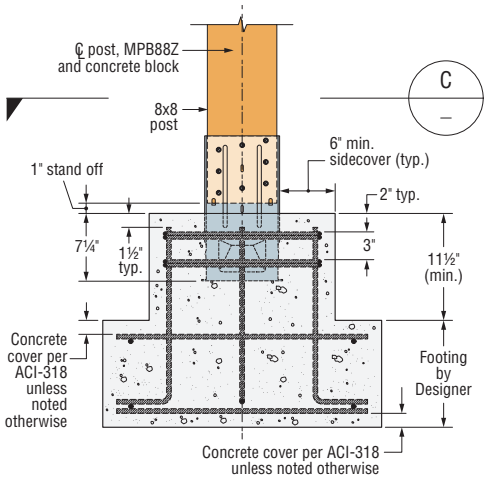
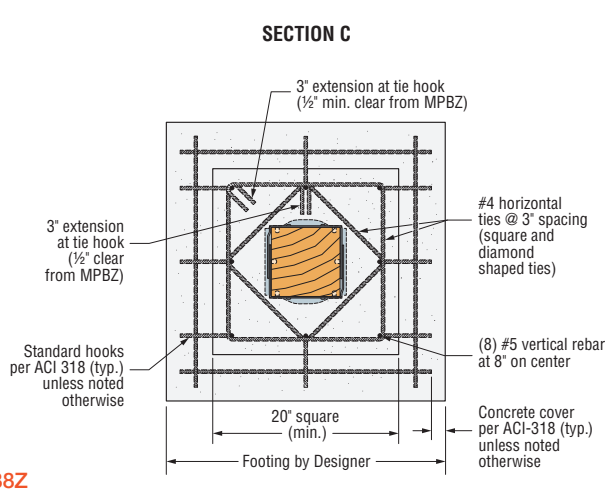
MPB44Z	4x4	3⁹⁄₁₆	7¼	7¼	(16) ¼" x 2½"	4,785	3,350	1,535	1,075	1,540	1,540	6,240	6,410	1,540	1,245,000	
MPB66Z	6x6	5⁹⁄₁₆	7¼	7¼	(24) ¼" x 2½"	5,815	5,815	3,015	2,110	3,350	2,795	9,360	10,855	3,730	2,405,000	—
NEW MPB88Z	8x8	7⁹⁄₁₆	7¼	7¼	(36) ¼" x 3"	7,420	6,100	6,965	4,875	4,525	4,525	15,120	17,585	4,525	5,500,000	

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. To obtain LRFD values, multiply ASD seismic load values by 1.4 and wind load values by 1.67 (1.6 for 2012 IBC).
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. To achieve full wood assembly allowable moment loads, additional concrete design and reinforcement by Designer is required.
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%.





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