Uplift

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Post Anchors are used to secure wood posts to concrete footings. These post anchors also provide moisture damage protection and feature a 1" stand-off plate to elevate wood posts above concrete surfaces as required by building code.

PAE - 2-sided post anchors with high uplift and bearing capacity

PA - High capacity utilizing 4-sided design

PAU - Higher uplift resistance and optional bolt fastening to post

Materials: See chart

Finish: G90 galvanizing, PA66ER-TZ - G-185 galvanizing

Options: See chart for Corrosion Finish Options

Codes: See chart for code references IRC R317.1.4, IBC 2304.12.2.2, IRC R407.3, IBC 2304.10.7

Installation:

- Use all specified fasteners. Install with supplied washer.
 See Product Notes, page 18.
- · Anchor bolts and nails are not furnished.
- Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These anchors are not designed to resist overturning (moment) loads.
- Anchor bolt installation place specified diameter anchor bolt at desired location with minimum 4" embedment into minimum 2,500 psi concrete. A minimum 2" edge distance from the outermost edge of the post base to the edge of the concrete is required to achieve allowable loads.
- For cured concrete or retrofit installations use specified diameter threaded rod with MiTek's CIA-EA or CIA-GEL 7000-C adhesive epoxy, following installation instructions. Contact MiTek Engineering for further information on selecting the proper epoxy.



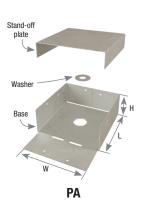
Typical PA44E installation







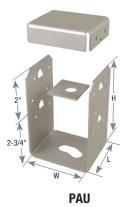
PAE





PAU cross-section







Continued on next page

			Steel	Gauge	Din	nensions	(in)		Fast	ener	Schedu	ıle ^{2,4}			-			
									chor		Po	st		Allowabl	e Loads	(Lbs.) ³		
				Stand-				Bolt		Nails		Bolts			Up	lift ¹	uo	
Post/ Column Size	MiTek USP Stock No.	Ref. No.	Base	off Plate	W	Н	L	Qty	Dia. (in)	Qty	Туре	Qty	Dia. (in)	Bearing 100%	Nails 160%	Bolts 160%	Corrosion Finish	Code Ref.
	PA44		18	12	3-9/16	2-1/4	3-1/2	1	1/2	8	16d			4155	455			
4 x 4	PA44E	ABA44	18	16	3-9/16	3-1/2	3-1/2	1	1/2	6	16d			6775	1035			
	PAU44	ABU44	12	16	3-9/16	5-7/16	3	1	5/8	12	16d	2	1/2	6775	2535	2265		
4 x 4 Rough	PA44R		18	12	4-1/16	2-1/2	4	1	1/2	12	16d			4155	455			IBC, FL,
	PA46		18	12	3-9/16	2-1/4	5-1/2	1	1/2	14	16d			4155	455			LA
4 x 6	PA46E	ABA46	18	12	3-9/16	3-1/2	5-1/2	1	5/8	8	16d			6775	1035			
	PAU46	ABU46	10	12	3-9/16	6	5	1	5/8	12	16d	2	1/2	13815	2535	2265		
4 x 6 Rough	PA46R		18	10	4-1/16	3-1/2	6	1	1/2	14	16d			4155	455			
5 x 5 Rough	PA55R-TZ		16	12	5	3-5/8	5	1	1/2	8	16d HDG			4155	455			
	PA66		18	12	5-1/2	2-7/8	5-1/2	1	1/2	16	16d			5930	250			
6 x 6	PA66E	ABA66	14	12	5-1/2	3-1/2	5-1/2	1	5/8	8	16d			16005	1130			
	PAU66	ABU66	10	12	5-1/2	6	5	1	5/8	12	16d	2	1/2	16005	2455	2265		
	PA66R		18	12	6-1/16	3-1/4	6-1/16	1	1/2	16	16d			5930	250			
6 x 6 Rough	PA66ER-TZ	ABA66R	14	12	6	3-1/4	5-1/2	1	5/8	8	16d HDG			16005	1130			
	PAU66R-TZ	ABU66RZ	10	12	6-1/16	5-3/4	5	1	5/8	12	16d HDG	2	1/2	16005	1475	1475		IBC, FL,
8 x 8	PAU88	ABU88	12	12	7-1/2	7-3/16	7-1/16	2	5/8	14	16d			24900	3315			LA
8 x 8 Rough	PAU88R	ABU88R	12	12	8-1/16	6-15/16	7-1/16	2	5/8	14	16d			24900	3315			
10 x 10	PAU1010	ABU1010	12	16	9-1/2	7-3/16	9-1/2	2	5/8	14	16d	2	5/8	27095	1495	1495		
10 x 10 Rough	PAU1010R		12	16	10-1/16	7-3/16	10	2	5/8	14	16d	2	5/8	27095	1495	1495		
12 x 12	PAU1212	ABU1212	12	16	11-1/2	6-7/8	11-1/2	2	5/8	18	16d	2	5/8	64015	1180	1180		
12 x 12 Rough	PAU1212R		12	16	12-1/8	6-7/8	12-1/8	2	5/8	18	16d	2	5/8	64015	1180	1180		

¹⁾ Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

MiTek® USP® Product Catalog

²⁾ All bolts shall meet or exceed the specifications of ASTM A 307.

³⁾ Allowable loads are based on the use of either nails or bolts; nail and bolt values cannot be combined.

⁴⁾ **NAILS:** 16d nails are 0.162" dia. x 3-1/2" long.

New products or updated product information are designated in blue font.

RPB-TZ post base attaches 4x4 or larger wood posts to concrete or wood surfaces after the post is in place. Can be installed with 1 or 2 RPB-TZs (single or double). Post may also be installed on our CPB composite post base product which provides a 1" stand off as required in untreated wood installations. Installs with concrete screws, so no more mis-installed, mis-located anchor bolts!

Materials: 12 gauge Finish: G-185 galvanizing

Installation:

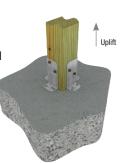
- MiTek's WS structural wood screws and screw anchors are not included with RPB bases.
- Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These anchors are not designed to resist overturning (moment) loads.

• Concrete Installation:

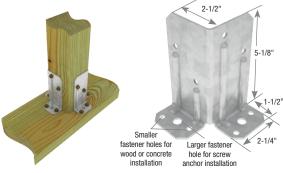
- Place RPB-TZ over one corner of post flush to both concrete and post surfaces and mark hole locations in concrete. Place aside.
- 2. Drill holes for concrete screws using appropriate bit and hammer drill.
- 3. Place RPB-TZ in position and install with specified screw anchors as listed in table below.
- 4. Repeat for RPB-TZ on other side of post for double installations.

Wood-to-Wood Installation:

- 1. Place RPB-TZ over one corner of post flush to wood base and post surfaces.
- 2. Install all specified MiTek WS structural wood screws as listed in the table below.
- Repeat for RPB-TZ on other side of post for double installations.



Typical double RPB-TZ concrete installation

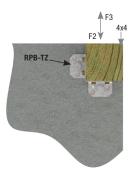


Typical double RPB-TZ wood-to wood installation

RPB-TZ



Typical double RPB-TZ concrete installation Min 2-1/2" from any concrete edge (Top view)



Typical single RPB-TZ installation at concrete corner, flush to edge (Top view)



Typical double RPB-TZ installation with CPB composite post base (CPB ordered separately)

MiTek USP					Fastene	r Sche	edule ⁴	DF/SP AI	lowable Loads	s (Lbs.) ^{1,5}	=		
		Steel	Qty of		Post		Base	Uplift	F2	F3	Corrosion Finish	Code	
Stock No.	Ref. No.	Gauge	RPBs	Qty	Wood Screw	Qty Screw Anchor ^{2,3}		160%	160%	160%	Cori Fini	Code Ref.	
					Co	ncret	e Base with Post Flu	ısh to Corner ⁶					
			1	4	WS3	2	3/8" x 2-1/2"	1525	710	495			
			_ '	4	WOO	4	Tapper+	735					
			1	4	WS15	2	3/8" x 2-1/2"	1470	710	495			
			'	-	WSTS	4	Tapper+	735	655	433			
					Concret	e Base	e with Post 2-1/2" fi	rom Concrete	Edge ⁴				
RPB-TZ	RPBZ	12	1	4	WS15 or WS3	2	3/8" x 2-1/2"	1470 ⁹	710	495			
			_ '_		W013 01 W03	4	Tapper+	865	655	433			Corrosion
			2 ⁵	8	WS15 or WS3	4	3/8" x 2-1/2"	2295	990	990			Finish
RPB-TZ				U	W010 01 W00	8	Tapper+	1735	330	330			Stainless Steel
							LVL Base/SP Bas	e ^{7,8}					Gold Coat
			1	4	WS15 or WS3	4	WS15	1110	960	495			HDG
RPB-TZ			2	8	WS15 or WS3	8	WOIJ	2220	300	733			Triple Zinc

- Allowable loads are for DF/SP 4x4, 6x6, or larger posts. For SPF/HF loads, multiply the allowable load by 0.86.
- Use DeWalt 3/8" x 2-1/2" Screw-Bolt™+ screw anchor; or equal, installed in accordance with manufacturer's specification. Screw anchors are not supplied.
- 3) Use Powers 1/4" x 1-3/4" Tapper+ concrete screw anchor (not supplied); or equal, installed in accordance with manufacturer's specification.
- 4) When installing connectors in pairs, the post must be a minimum of 2-1/2" from the edge of the concrete.
- Allowable loads have been increased 60% for wind and seismic loads; no further increase shall be permitted.
- 6) Concrete compressive strength shall be 2,500 psi or greater at 28 days.
- 7) LVL framing base shall be at least 1-3/4" thick.
- 8) SP framing base shall be at least 1-1/2" thick.
- Allowable uplift for single RPB-TZ using WS3 structural wood screws with Screw-Bolt™+ screw anchors for concrete base with post 2-1/2" from concrete edge is 1.525 lbs.
- 10) MiTek's structural wood screws and DeWalt screw anchors should be used only in interior-dry and
- 11) Use MiTek's WS15-EXT or WS3-EXT structural wood screws when installing to treated wood.

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WAS - A formed base providing a 1" stand-off with high bearing capacity.

WE - A formed, one-piece design. Includes embossing for additional lateral strength.

Materials: See chart Finish: G90 galvanizing

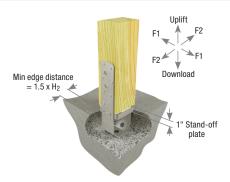
Options: See chart for Corrosion Finish Options

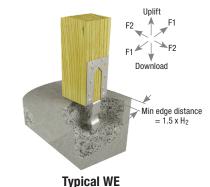
Codes: IBC. FL. LA

IRC R317.1.4, IBC 2304.12.2.2, IRC R407.3, IBC 2304.10.7

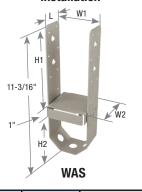
Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Insert into wet concrete after the pour. For the WE, embed the anchor so that the base plate is flush with the surface of the concrete. For the WAS, embed the anchor until the concrete surface meets the bottom edge of the stand off base legs. This will provide a 1" stand-off where required.
- Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These anchors are not designed to resist overturning (moment) loads.





Typical WAS installation





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			St	eel		ъ.	•	<i>C</i> .)		Fa	stener		DF	SP Allow	able Load	ds (Lbs.) ^{2,}	4			
			Gauge Dimensions (in)					(in)		Sch	edule ^{5,6}	Uncracked Concrete				Crac	ked Conc	rete		
Post Size	MiTek USP Stock No.	Ref. No.	Base	Strap	W1	W2	H1	H2 ³	L	Qty	Туре	Download 100%	Uplift ¹ 160%	F1 160%	F2 160%	Uplift ¹ 160%	F1 160%	F2 160%	Corrosion Finish	Code Ref.
									S	DC A 8	& B									
	WE44	PB44	12	12	3-1/2		4-3/4	3-3/8	3-1/4	12	16d 1/2	15335	1405 1430	860 860	970 970	1245 1245	600	680 680		
4 x 4	WAS44	PBS44A	16	14	3-9/16	3-1/2	6-3/4	3-1/2	2-1/4	14	16d	6775	3090	1365	1095	2165	955	770		
						0 .//				2	1/2		3075	1365	1095	2165	955	770		
4 x 4 Rough	WE44R	PB44R	12	12	4		5	3-5/8	3-3/8	12	16d	15335	1405	860	970	1245	600	680		
	WE46	PB46	12	12	5-1/2		4-3/4	3-3/8	3-1/4	12	16d	24130	1405	860	970	1245	600	680		IBC,
4 x 6		1510								2	1/2		1430	860	970	1245	600	680		FL, LA
	WAS46	PBS46	12	14	3-9/16	5-1/2	6-3/4	3-1/2	2-1/4	14	16d	13815	3090	1365	1095	2165	955	770		
	11/5 100		- 10	- 10				0 = 10	0.0/0	2	1/2	04400	3075	1365	1095	2165	955	770	_	
4 x 6 Rough	WE46R		12	12	6		5	3-5/8	3-3/8	12	16d	24130	1405	860	970	1245	600	680		
C v C	WE66	PB66	12	12	5-1/2		5	5 3-5/8	5-3/8	12	16d	29565	1405	860 1955	970 1685	1245	600	680		1
6 x 6	WAS66	PBS66	12	12	5-1/2	5-1/2	6-3/4	5	2-1/4	14	16d 1/2	16005	3365 3575	1955	1685	2505 2505	1370 1370	1685 1685		
6 x 6 Rough	WE66R	PB66R	12	12	6		5	3-5/8	5-3/8	12	16d	29565	1405	860	970	1245	600	680		
o x o nough	WEGGIT	1 BOOM	12	12	Ū		0	0 0/0		SDC C		20000	1100	000	010	12 10	000	000		
	WE 4.4	DD 4.4	10	12	0.1/0		4-3/4	3-3/8	8 3-1/4	12	16d	15335	1255	755	850	1090	525	595		
4 11 4	WE44	PB44	12		3-1/2					2	1/2	15335	1255	755	850	1090	525	595		
4 x 4	WAS44	PBS44A	16	14	3-9/16	3-1/2	6-3/4	2 1/2	2-1/4	14	16d	6775	2705	1195	960	1895	835	675		
	WA344	FD344A	10	14	3-9/10	3-1/2	0-3/4	3-1/2	2-1/4	2	1/2	6773	2705	1195	960	1895	835	675		
4 x 4 Rough	WE44R	PB44R	12	12	4		5	3-5/8	3-3/8	12	16d	15335	1255	755	850	1090	525	595		
	WE46	PB46	12	12	5-1/2		4-3/4	3-3/8	3-1/4	12	16d	24130	1255	755	850	1090	525	595		IBC,
4 x 6	11110	1 040	12	12	0 1/2		7 0/7	0 0/0	0 1/4	2	1/2	24100	1255	755	850	1090	525	595		FL,
4 7 0	WAS46	PBS46	12	14	3-9/16	5-1/2	6-3/4	3-1/2	2-1/4	14	16d	13815	2705	1195	960	1895	835	675		LA LA
		. 50 .0				0 ./2				2	1/2		2705	1195	960	1895	835	675] "
4 x 6 Rough	WE46R		12	12	6		5	3-5/8	3-3/8	12	16d	24130	1255	755	850	1090	525	595		
	WE66	PB66	12	12	5-1/2		5	3-5/8	5-3/8	12	16d	29565	1255	755	850	1090	525	595	_	
6 x 6	WAS66	PBS66	12	12	5-1/2	5-1/2	6-3/4	5	2-1/4	14	16d	16005	3135	1715	1685	2195	1200	1665		
								Ů		2	1/2		3135	1715	1685	2195	1200	1665		1
6 x 6 Rough	WE66R	PB66R	12	12	6		5	3-5/8	5-3/8	12	16d	29565	1255	755	850	1090	525	595		

- 1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Allowable loads are based on the use of either nails or bolts; nail and bolt values cannot be combined.
- 3) H2 is mimimum embedment length of anchor into concrete.
- 4) Minimum concrete strength f'c = 2,500 psi.
- 5) All bolts shall meet or exceed the specifications of ASTM A 307.
- 6) NAILS: 16d nails are 0.162" dia. x 3-1/2" long.

Corrosion Finish Stainless Steel Gold Coat HDG Triple Zinc

Secures nominal sized posts to wood surfaces for light-duty applications.

Materials: 18 gauge

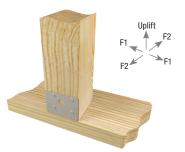
Finish: G90 galvanizing; D44-TZ & D46R-TZ - G-185 galvanizing

Options: See chart for Corrosion Finish Options

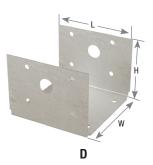
Codes: IBC, FL, LA

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These anchors are not designed to resist overturning (moment) loads.
- While D series post anchors offer lateral and uplift resistance, they are not recommended as a primary means of anchorage for posts in railings.



Typical D installation



				Dime	nsions	(in)	F	astener	Schedu	ıle²		DF/SP						
							P	ost	Beam		Allowa	ble Loads	(Lbs.) ¹	Allowa	u			
Post Size	MiTek USP Stock No.	Ref. No.	Steel Gauge	W	Н	L	Qty	Туре	Qty	Туре	Uplift 160%	F1 160%	F2 160%	Uplift 160%	F1 160%	F2 160%	Corrosi Finish	Code Ref.
4 x 4	D44-TZ	BC40, BC40Z	18	3-9/16	2-1/2	3-3/8	8	16d HDG	4	16d HDG	700	885	885	565	760	760		
4 x 4 Rough	D44R	BC40R	18	4	3	3-3/4	8	16d	4	16d	700	885	885	565	760	760		
4 x 6	D46	BC460	18	3-9/16	3	5-3/8	10	16d	5	16d	700	995	1095	585	840	920		IBC.
4 x 6 Rough	D46R-TZ		18	4	3	5-3/8	10	16d HDG	5	16d HDG	700	995	1095	585	840	920		FL, LA
6 x 6	D66	BC60	18	5-1/2	3	5-3/8	10	16d	5	16d	700	995	1095	585	840	920		
6 x 6 Rough	D66R	BC60R	18	6	3	5-3/8	10	16d	5	16d	700	995	1095	585	840	920		
8 x 8	D88	BC80	18	7-1/2	3	7-3/8	12	16d	5	16d	700	995	1095	585	840	920		

¹⁾ Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

New products or updated product information are designated in **blue font.**

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

²⁾ **NAILS:** 16d nails are 0.162" dia. x 3-1/2" long.