# MiTek<sup>®</sup> USP<sup>®</sup> Structural Connectors

# **Uplift Connection for Woodtone RealPost**<sup>™</sup>

MiTek USP conducted testing to determine uplift capacities of several commonly used products for use with the Woodtone RealPost<sup>™</sup> hollow column. Products include KCCQ column caps, CBSQ column bases, PAU post anchors, PCM/EPCM post caps and RPB retrofit post base.

The allowable design values listed in the chart below are based on testing and calculation for the reduced material thickness of the Woodtone RealPost<sup>™</sup> hollow column and are the lesser of the following:

- Average 1/8" deflection from testing
- Lowest Ultimate test value / 3 (Factor of Safety = 3)
- · Fastener calculations per National Design Specification (NDS) for wood

#### Installation:

- Use all specified fasteners in the load table.
- WS3 Wood Screws, 1/4" dia. x 3" long, are supplied with KCCQ Column Caps.
- WS2-EXT Wood Screws, 1/4" dia. x 2" long are supplied with CBSQ Column Bases.
- CBSQ Bases require a minimum concrete side cover of 3" for full uplift capacity.
- See MiTek product catalog for additional product specific installation instructions.

#### **KCCQ Column Caps Load Table**

				Fastener	Sched	SPF/DF RealPost <sup>™</sup>	
Column	USP		Beam         Column or Pos           Ref. No.         Qty         Screws         Qty         Screws		nn or Post	Allowable Loads (Lbs.)	
Size	Stock No.	Ref. No.			Qty	Screws	Uplift 160% <sup>1,2,3</sup>
4 x 4	KCCQ44	CCQ44SDS2.5	16	WS3	14	WS3	4600
4 x 6	KCCQ46	CCQ46SDS2.5	16	WS3	14	WS3	4600
6 x 6	KCCQ48	CCQ48SDS2.5	16	WS3	14	WS3	4110

1) Uplift loads have been increased 60% for wind and seismic loads, no further increase shall be permitted. 2) Spliced conditions must be detailed by the specifier to transfer tension loads between spliced members

by means other than the column cap.

3) Uplift loads do no apply to splice conditions.

4) WS3 Wood Screws are 1/4" dia. x 3" long and are included with KCCQ Column Caps.

#### CBSQ Column Bases Load Table

			Fastener		SPF/DF R	ealPost™ All	lowable Loads (Lbs.) <sup>2,3</sup>		
			Schedule <sup>4</sup>		Uncracked Concrete		Cracked Concrete		
Column	USP		Column or Post		Uplift 160% <sup>1</sup>		Uplift 160% <sup>1</sup>		
Size	Stock No.	Ref. No.	Qty	Screws	SDC A & B	SDC C-F	SDC A & B	SDC C-F	
4 x 4	CBSQ44-TZ	CBSQ44-SDS2	14	WS2-EXT	4520	4520	4165	3570	Ī
4 x 6	CBSQ46-TZ	CBSQ46-SDS2	14	WS2-EXT	4520	4520	4165	3570	
6 x 6	CBSQ66-TZ	CBSQ66-SDS2	14	WS2-EXT	4550	4550	4550	4525	]

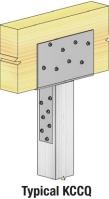
1) Uplift loads have been increased 60% for wind and seismic loads, no further increase shall be permitted.

2) CBSQ device shall be embedded into concrete 7-3/16". Minimum side cover for embedded portion is 3".

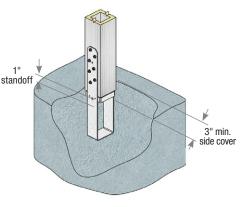
3) Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications.

These bases are not designed to resist overturning (moment) loads.

4) WS2-EXT Wood Screws are 1/4" dia. x 2" long and are included with CBSQ Column Bases.



installation





#### **Customer Service & Technical Assistance**

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### Technical Bulletin Uplift Connection for Woodtone RealPost™



#### **PCM/EPCM Post Caps Load Table**

			_			2					
			Fa	stener	Scheo	lule²	SPF/DF RealPost <sup>™</sup>				
Column	USP		В	eam		lumn Post	Allowable Loads (Lbs.)				
Size	Stock No.	Ref. No.	Qty	Туре	Qty	Туре	Uplift 160% <sup>1</sup>				
Center Column Caps											
4x4	PCM4416	PC44-16	8	16d	12	16d	940				
474	PCM44	PC44	8	16d	12	16d	1715				
6x6	PCM6616	PC66-16	8	16d	12	16d	995				
0.00	PCM66	PC66-16	8	16d	12	16d	1560				
8x8	PCM8816	PC88-16	8	16d	12	16d	995				
010	PCM88	PC88	8	16d	12	16d	1560				
		Enc	d Colu	ımn Caj	ps						
4x4	EPCM4416	EPC44-16	8	16d	12	16d	940				
474	EPCM44	EPC44	8	16d	12	16d	1715				
6x6	EPCM6616	EPC66-16	8	16d	12	16d	995				
0X0	EPCM66	EPC66-16	8	16d	12	16d	1560				
8x8	EPCM8816	EPC88-16	8	16d	12	16d	995				
0,00	EPCM88	EPC88	8	16d	12	16d	1560				

1) Uplift loads have been increased 60% for wind or seismic loads;

no further increase shall be permitted.

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

#### **PAU Post Anchors Load Table**

			F	astener	Sched	ule	SPF/DF RealPost <sup>™</sup>		
			Anch	or Bolt <sup>3</sup>	Column		Allowable Loads (Lbs.) <sup>4</sup>		
Column	USP			Dia	or	Post⁵	Bearing	Uplift	
Size	Stock No.	Ref. No.	Qty	(inch)	Qty Type		100% <sup>2</sup>	160% <sup>1</sup>	
4x4	PAU44	ABU44	1	5/8	12	16d	6775	2255	
6x6	PAU66	ABU66	1	5/8	12	16d	6950	1750	
8x8	PAU88	ABU88	2	5/8	14	16d	24900	2255	

1) Uplift loads have been incread 60% for wind or seismic loads:

no further increase shall be permitted.

2) Downloads shall be taken as the lesser of the table loads or the post capacity.

3) Designer shall design concrete and anchor embedment for uplift.

4) Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These bases are not designed to resist overturning (moment) loads.

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

#### **RPB-TZ Retrofit Post Base Load Table**

					Fastener	Sche	edule	SPF/DF RealPost™		
				Post		Base		Allowable Loads (Lbs.) <sup>1,4,5,6,7</sup>		
Column Size	USP Stock No.	Ref. No.	Qty of RPB's	Qty	Туре	Qty	Screw Anchor <sup>2,3</sup>	Uplift 160%		
		RPBZ		Concrete Base with Post Flush to Corner <sup>7</sup>						
	RPB-TZ		1	4	WS15-EXT	2	3/8" x 2-1/2"	1230		
						4	Tapper+	735		
4.4					Concrete Base with Post 2-1/2" from Concrete Edge <sup>8</sup>					
4x4, 6x6,			1	4	WS15-EXT	2	3/8" x 2-1/2"	1230		
or						4	Tapper+	865		
8x8			2	8	WS15-EXT	4	3/8" x 2-1/2"	2295		
0,10				0	WOTS-EXT	8	Tapper+	1735		
				LVL Base/SP Base <sup>9,10</sup>						
			1	4	WS15-EXT	4	WS15-EXT	1110		
			2	8	WS15-EXT	8	WS15-EXT	2220		

1) Allowable loads valid for 4x4, 6x6, or 8x8 Woodtone RealPost™

2) Use Powers 3/8" x 2-1/2" Wedge-Bolt+ or DeWalt 3/8" x 2-1/2" Screw-Bolt+; or equal, installed in accordance with manufacturer's specification. Anchors are not supplied.

 Use Powers 1/4" x 1-3/4" Tapper+ concrete screw anchor; or equal, installed in accordance with manufacturer's specification. Tapper+ anchors are not supplied.

4) In corner installations, where one connector is being used, the post may be flush to the edge of the concrete for full table load.

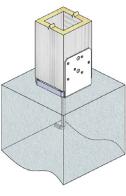
5) When installing connectors in pairs, the post must be a minimum of 2-1/2" from the edge of the concrete.

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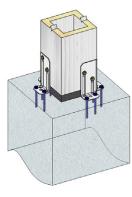
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Typical PCM44 Installation



PAU66



#### **RPB-TZ**

6) Allowable loads have been increased 60% for wind and seiesmic loads; no futher increase shall be permitted.

 Not recommended for fence posts or other unrestrained (not fixed or fastened at top) applications. These bases are not designed to resist overturning (moment) loads.

8) Concrete compressive strength shall be 2,500 psi or greater at 28 days.

9) LVL framing base shall be at least 1-3/4" thick.

10) SYP framing base shall be at least 1" thick.

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