

# PRE-ASSEMBLED ANCHOR RODS

## PAR series

The PAR is a high-uplift, cast-in-place anchor bolt—perfect for rod tie-downs and shear walls. Preassembled with a plate washer and nuts, it's fully assembled and ready to install.

**Materials:** Standard Strength – ASTM F1554 Grade 36, A36 or A307,  $F_u = 58\text{ksi}$ ;  
High Strength – ASTM A193 B7

**Finish:** None. May be ordered in HDG.

**Options:** Available in diameters from 1/2" to 1-1/4" and lengths from 12" to 36" in 6" increments.

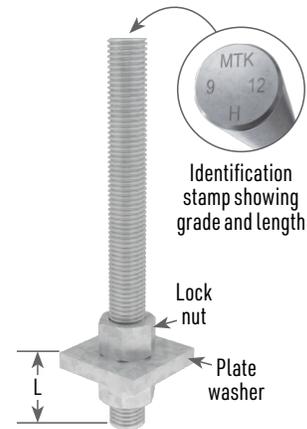
### PAR Stock Number Naming Key



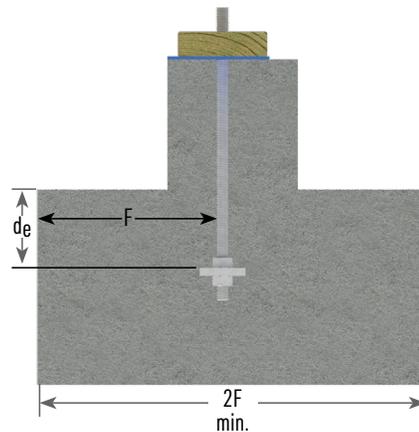
The first set of numerals in the PAR Stock number indicate diameter in 1/8" increments (i.e. 4=4/8" or 1/2", 9 = 9/8 or 1-1/8"). The addition of an "H" indicates a high-strength rod. The last 2 numerals in the PAR Stock number indicate length.

### Installation:

- Follow all edge distance and embedment depth requirements per allowable load table.



PAR9H-12 assembly



# PRE-ASSEMBLED ANCHOR RODS

## PAR series

Diameter (in)	MiTek <sup>5</sup> Stock No.	Ref. No.	PlateWasher		L (in)	2,500 psi Concrete				3,000 psi Concrete			
			Hole Dia. (in)	Washer Size (in)		Embedment Depth (in)	Edge Distance (in)	Anchor Tension <sup>1</sup> (lb)		Embedment Depth (in)	Edge Distance (in)	Anchor Tension <sup>1</sup> (lb)	
								ASD	LRFD			ASD	LRFD
Wind Design SDC A & B													
1/2	PAR4XX	PAB4	9/16	3/8 x 1-1/2 x 1-1/2	1-1/8	4-1/2	8	4,270	6,405	3-1/2	6-1/2	4,270	6,405
	PAR5XX	PAB5	11/16	1/2 x 1-3/4 x 1-3/4	1-3/8	4	7-1/2	5,535	9,230	3-1/2	6-1/2	5,175	8,625
	PAR5HXX	PAB5H	11/16	1/2 x 1-3/4 x 1-3/4	1-3/8	5	9	6,675	10,010	4-1/2	8	6,675	10,010
3/4	PAR6XX	PAB6	13/16	1/2 x 2-1/4 x 2-1/4	1-1/2	7-1/2	12-1/2	12,335	20,560	7	12	12,330	20,555
	PAR7XX	PAB7	15/16	1/2 x 2-1/2 x 2-1/2	1-5/8	8-1/2	14	13,805	20,710	8	13-1/2	13,805	20,710
	PAR7HXX	PAB7H	15/16	1/2 x 2-1/2 x 2-1/2	1-5/8	5-1/2	9-1/2	8,395	13,990	5	9	8,165	13,605
7/8	PAR8XX	PAB8	1-1/16	5/8 x 2-3/4 x 3	1-7/8	6-1/2	11	9,700	14,550	6	10-1/2	9,700	14,550
	PAR8HXX	PAB8H	1-1/16	5/8 x 2-3/4 x 3	1-7/8	6	10-1/2	9,550	15,915	5-1/2	9-1/2	9,380	15,635
	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	9	15	13,390	20,085	7-1/2	12-1/2	13,390	20,085
1	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	9	15	16,175	26,960	8-1/2	14	16,425	27,370
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	13-1/2	21-1/2	27,705	41,555	12-1/2	20	27,705	41,555
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	8	13-1/2	14,300	23,835	7-1/2	13	14,425	24,040
1-1/8	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	9-1/2	16	17,565	26,350	9	15	17,565	26,350
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	10-1/2	17-1/2	20,420	34,035	10	16-1/2	20,965	34,945
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	15-1/2	25	36,345	54,515	15	24	36,345	54,515
1-1/4	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	9	15-1/2	16,870	28,115	8	14	15,885	26,475
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	11-1/2	19	22,135	33,200	10-1/2	17-1/2	22,135	33,200
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	13	21-1/2	28,105	42,155	12-1/2	20-1/2	28,105	42,155
Seismic Design Category C – F													
1/2	PAR4XX	PAB4	9/16	3/8 x 1-1/2 x 1-1/2	1-1/8	4	7	4,270	6,405	4	7	4,270	6,405
	PAR5XX	PAB5	11/16	1/2 x 1-3/4 x 1-3/4	1-3/8	5-1/2	9-1/2	6,675	10,010	5	9	6,675	10,010
	PAR5HXX	PAB5H	11/16	1/2 x 1-3/4 x 1-3/4	1-3/8	8-1/2	14	12,770	18,240	8	13-1/2	12,890	18,415
3/4	PAR6XX	PAB6	13/16	1/2 x 2-1/4 x 2-1/4	1-1/2	9-1/2	15-1/2	13,805	20,710	8-1/2	14	13,805	20,710
	PAR7XX	PAB7	15/16	1/2 x 2-1/2 x 2-1/2	1-5/8	6-1/2	11	9,090	12,990	6	10	8,765	12,522
	PAR7HXX	PAB7H	15/16	1/2 x 2-1/2 x 2-1/2	1-5/8	7	12	9,700	14,550	6-1/2	11	9,700	14,550
7/8	PAR8XX	PAB8	1-1/16	5/8 x 2-3/4 x 3	1-7/8	8	13-1/2	12,110	17,300	7-1/2	12-1/2	12,190	17,415
	PAR8HXX	PAB8H	1-1/16	5/8 x 2-3/4 x 3	1-7/8	9	15	13,390	20,085	8-1/2	14	13,390	20,085
	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	13-1/2	21-1/2	25,295	36,135	12-1/2	20	24,595	35,135
1	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	14-1/2	23	27,705	41,555	13-1/2	21-1/2	27,705	41,555
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	9-1/2	16	15,650	22,355	9	15	15,970	22,815
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	10-1/2	17-1/2	17,565	26,350	10	16-1/2	17,565	26,350
1-1/8	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	16	25-1/2	33,555	47,935	15	24	33,255	47,510
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	17	27	36,345	54,515	16	25-1/2	36,345	54,515
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	11-1/2	19	20,420	29,170	10-1/2	17-1/2	19,785	28,270
1-1/4	PAR9XX	PAB9	1-3/16	5/8 x 3-1/4 x 3-1/2	2	12-1/2	20-1/2	22,135	33,200	11-1/2	19	22,135	33,200
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	13	21-1/2	25,095	35,850	12-1/2	20-1/2	25,920	37,030
	PAR10XX	PAB10	1-5/16	3/4 x 3-1/2 x 3-1/2	2-1/4	14-1/2	23-1/2	28,105	42,155	13-1/2	22	28,105	42,155

- 1) ACI 318-11/14 design assumptions:
  - a. Cracked concrete.
  - b. No supplementary reinforcement.
  - c. Seismic design includes Seismic Design Categories (SDC) C through F with the following exception - Detached 1- and 2-family dwellings in SDC C may use wind design criteria.
  - d. Wind designs criteria apply to SDC A and B.
  - e. Recommended foundation dimensions are for tension (uplift) forces ONLY in accordance with ACI 318-11/14. Foundation design is the responsibility of the Registered Design Professional.

- 2)  $d_e$  = minimum depth of embedment
- 3)  $F$  = minimum perpendicular distance from anchor axis to edge of foundation.
- 4)  $d_e$  values rounded to the nearest 1/2".
- 5) "H" in the stock number denotes High Strength Rod.

