

MASTERSPEC - SECTION 03 15 19

PIER ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Pier accessories indicated, specified, or required to complete installation.

1.2 SUBMITTALS

- A. Product Data: Manufacturers technical literature for each type of manufactured material and product indicated.
- B. Certification: Manufacturer's written certification that products furnished comply with or exceed specified requirements.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified with minimum of three years documented experience.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle materials to prevent damage.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. PIERESEARCH®, 501 East Main Street, Arlington TX, 76010; phone (800) 342-2409; (817) 277 3738; Fax (817) 275.2335; www.pieresearch.com.
- B. For manufacturers not listed, submit as substitution according to the Conditions of the Contract and Division 01 Specification Sections.

**NOTE TO SPECIFIER: NORMALLY SELECT ONE OF THE FOLLOWING PRODUCTS PIER WHEEL (QUICK-LOCK®) OR HEAVY DUTY PIER WHEEL (QUICK-LOCK HD®). THESE PRODUCTS ARE SUBSTANTIALLY EQUIVALENT WHEN THE QUANTITIES SPECIFIED ARE USED - THE DESIRED RESULTS MAY NOT BE ACHIEVED IF LESS THAN THE QUANTITY SPECIFIED ARE USED**

2.2 HEAVY DUTY PIER WHEEL (QUICK-LOCK HD®)

- A. Description:
  - 1. Snap 6 inch wheel for attachment to the ties of a reinforcing cage for drilled piers; wheel rotates against drilled pier sidewalls to maintain proper alignment when reinforcing cages are being lowered; sized to provide 3 inches of concrete cover over reinforcing bars.
  - 2. Fabricated of non-corrosive plastic and fits No. 3 through No. 7 reinforcing bar ties.
  - 3. Provide minimum number of wheels per reinforcing cage, uniformly spaced to properly align cage in shaft:

Pier Shaft Depth in Feet	Pier Shaft Diameter in Inches			
	Up to 48	49 to 72	73 to 96	97 to 120
0 to 12	8	12	16	20
13 to 24	12	18	24	30
25 to 36	16	24	32	40
37 to 48	24	36	48	60
49 to 60	28	42	56	70
61 to 72	36	54	72	90
73 to 84	40	60	80	100
85 to 96	48	72	96	120
97 to 108	52	78	104	130
109 to 120	60	90	120	150
121 to 132	64	96	128	160
133 to 144	72	108	144	180

### 2.3 PIER WHEEL (QUICK-LOCK®)

#### A. Description:

1. Snap 6 inch wheel for attachment to the ties of a reinforcing cage for drilled piers; wheel rotates against drilled pier sidewalls to maintain proper alignment when reinforcing cages are being lowered; sized to provide 3 inches of concrete cover over reinforcing bars.
2. Fabricated of non-corrosive plastic and fits No. 3 through No. 5 reinforcing bar ties.
3. Provide minimum number of wheels per reinforcing cage, uniformly spaced to properly align cage in shaft:

Pier Shaft Depth in Feet	Pier Shaft Diameter in Inches				
	Under 30	31 to 48	49 to 72	73 to 96	97 to 120
0 to 12	9	12	18	24	30
13 to 24	14	18	27	36	45
25 to 36	18	24	36	48	60
37 to 48	23	30	45	60	75
49 to 60	27	36	54	72	90
61 to 72	32	42	63	84	105
73 to 84	36	48	72	96	120
85 to 96	41	54	81	108	135
97 to 108	45	60	90	120	150
109 to 120	54	72	108	144	180
121 to 132	59	78	117	156	195
133 to 144	63	84	126	168	210

### 2.4 PIER BOLSTER (QUICK-LOCK PIER BOOT®)

#### A. Description:

1. Support devices attached to bottom end of vertical reinforcing in straight shaft drilled piers to prevent bottom of reinforcing bars from making contact with earth at bottom of drilled piers.
2. Fabricated of non-corrosive plastic.
3. Nominal 3-3/8 inch (86 mm) diameter by 6-1/4 inch (159 mm) high.
4. Quantity Required:

- a. One pier bolster on every other vertical bar for piers under 48 inches in diameter.
- b. One pier bolster on every vertical bar for piers 48 inches in diameter and over.

## 2.5 PIER BOLSTER (QUICK-ZIP BAR BOOSTER®)

### A. Description:

1. Support devices attached to bottom end of vertical reinforcing in straight shaft drilled piers to prevent bottom of reinforcing bars from making contact with earth at bottom of drilled piers; with integral zip ties.
2. Fabricated of non-corrosive plastic.
3. Nominal 3 inch (75 mm) diameter by 3 inch (75 mm) high.
4. Quantity Required:
  - a. One pier bolster on every other vertical bar for piers under 48 inches in diameter.
  - b. One pier bolster on every vertical bar for piers 48 inches in diameter and over.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Attach devices to reinforcing according to manufacturer's instructions.
- B. Snap pier wheel (QUICK-LOCK®) over horizontal ties.
- C. Snap pier wheel (QUICK-LOCK HD®) over horizontal ties.
- D. Install pier bolster (QUICK-LOCK PIER BOOT®) at bottom of vertical reinforcing bars.
- E. Install pier bolster (QUICK-ZIP BAR BOOSTER®) at bottom of vertical reinforcing bars and tighten zip tie.
- F. Do not use the following:
  1. Plastic wheels for stationary/static purposes, i.e. Precast Concrete Accessories.
  2. Dobie bricks or blocks.
  3. Accessories made of concrete masonry units or cinder blocks.

END OF SECTION