

SPECIFICATIONS FOR:

CENTRALIGNER PIER SLEDS & HIJACKER PIER BOLSTERS

SECTION 02351

PIER ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Centraligner pier sleds.
- B. Hijacker pier bolsters.

1.02 RELATED SECTIONS

- A. Section 02468 – Drilled Concrete Piers (Caissons).
- B. Section 03200 – Concrete Reinforcement.
- C. Section 03300 – Cast-In-Place Concrete.

1.03 SYSTEM DESCRIPTION

- A. Centraligner pier sleds: Support and alignment devices for placing vertical reinforcing in straight shaft drilled piers. Pier sleds prevent reinforcing steel from making contact with the earth sides of drilled piers.
- B. Hijacker pier bolsters: Support devices attached to the bottom end of vertical reinforcing in straight shaft drilled piers. Hijackers prevent the bottom of reinforcing bars from making contact with earth at the bottom of drilled piers.

1.04 REFERENCES

- A. ASTM C 109 – Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50mm] Cube Specimens).
- B. ASTM C 1090 – Standard Test Method For Measuring Changes in Height of Cylindrical Specimens From Hydraulic-Cement Grout.
- C. ASTM C 11170 – Standard Specification for Packaged Dry, Hydraulic-Cement Grout.

1.05 SUBMITTALS

- A. Samples: Provide one sample of each unit proposed for use.
- B. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.

1.06 QUALITY ASSURANCE

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

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Store and handle products to prevent damage.

PART 2 PRODUCTS

2.01 MANUFACTURER (PIER SLED AND BOLSTER)

- A. PIERESEARCH, 501 East Main Street, Arlington, TX 76010. Phone (800) 342-2409. Fax (817) 275-2335.
- B. Substitutions: See Section 01600 – Product Requirements.

2.02 PIER SLED (CENTRALIGNER)

- A. Fabricated concrete support with minimum compressive strength of 8,500 psi and integral wire ties.
 - 1. Wire ties: [Plain finish] [Galvanized] [Epoxy coated] [Stainless steel]. **[Specifier select appropriate material]**
 - 2. Manufactured sizes:
 - a. Nominal 8 x 3 x 1¼ inch (200 x 75 x 30 mm).
 - b. Nominal 8 x 4 x 1¼ inch (200 x 100 x 30 mm).
 - c. Use 3 inch sled for uncased, and 4 inch sled for cased piers.

- B. Provide minimum number of sleds per cage, spaced uniformly to properly align cage in shaft:

Pier Shaft Depth in Feet	Recommended Centraligner [®] pier sleds per Reinforcing Cage				
	Pier Shaft Diameter in Inches				
	under 30"	30" to 48"	49" to 72"	73" to 96"	97" to 120"
10' – 14'	6	8	12	16	20
15' – 24'	9	12	18	24	30
25' – 36'	12	16	24	32	40
37' – 48'	15	20	30	40	50
49' – 60'	18	24	36	48	60
61' – 72'	21	28	42	56	70
73' – 84'	24	32	48	64	80
85' – 96'	27	36	54	72	90
97' – 108'	30	40	60	80	100
109' – 120'	36	48	72	96	120
121' – 132'	39	52	78	104	130
133' – 144'	42	56	84	112	140

2.03 PIER BOLSTER (HIJACKER[™])

- A. Fabricated concrete support with minimum compressive strength of 8,500 psi and integral wire ties.
1. Wire ties: [Plain finish] [Galvanized] [Epoxy coated] [Stainless steel]. [**Specifier select appropriate material**]
 2. Manufactured size: Nominal 4 inch (100 mm) diameter by 3 inch (75 mm) high, with two 9 gage wires for attachment to bottom of reinforcing cage.
- B. Minimum number of bolsters per cage, spaced to support steel free of earth:

Recommended Hijackers [™] Pier Bolsters				
Pier Shaft Diameter in Inches				
under 30"	30" to 48"	49" to 72"	73" to 96"	97" to 120"
3	6	8	10	12

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install bolsters in minimum numbers indicated to support cage in shaft.
- B. Install alignment sleds in minimum numbers indicated to provide alignment of cage in shaft.
- C. Secure tie wires to prevent displacement of sleds and bolsters during placement of cage in shaft.

3.02 ADJUSTING

- A. Reposition units which are displaced.

END OF SECTION