

PIERESEARCH SERVES THE DEEP FOUNDATION AND EARTH RETENTION INDUSTRIES

PIERESEARCH SPECIALIZES IN REBAR REINFORCING ALIGNMENT AND CENTRALIZER PRODUCTS FOR EVERY CONSTRUCTION NEED.

Established in 1986 Pieresearch is the industry leader in rebar reinforcing alignment products. We provide durable, reliable, economical, proven and tested alignment products for drilled shafts, micropiles, augercast piles, soil nails, and rebar-reinforced earth retention anchors. Our new UnibarTM Centralizer products are specifically designed for the installation of soil nails, and related earth retention elements. We are committed to pursuing excellence in quality, on-time service, customer partnerships, and product innovation. Our products are proudly made in the USA!

QUALITY YOU CAN RELY ON

Construction professionals in the commercial, industrial, highway, educational, governmental, sports & entertainment, retail, food & beverage, marine, energy & power production, and transportation industries rely on Pieresearch's high quality, easy-to-install, noncorrosive plastic products. All our products are manufactured in a Fort Worth facility and meet the highest quality standards set by the Concrete Reinforcing Steel Institute and American Concrete Institute. We have integrated systems for every job and will manufacture custom accessories to meet any project specification.

BUILDING STRONG RELATIONSHIPS

We strive to conduct our day-to-day business with clear, open communication, keep our promises and place excellence in customer service above all. Over the years we have developed solid relationships with our customers, industry professionals, and manufacturers to deliver innovation and products that are built tough. We combine our product expertise and industry experience to deliver the optimal solution to any project, on time and within budget.

QUALITY PRODUCTS.
HONEST SERVICE.
GREAT VALUE.
PIERESEARCH.
CHOOSE PIERESEARCH FOR ALL
YOUR REBAR AND REBAR CAGE
ALIGNMENT PRODUCTS.

Our alignment products are unique one-piece designs, made of noncorrosive plastic, install in seconds and are built tough!

DURABLE. ECONOMICAL. RELIABLE. PROVEN.

Visit pieresearch.com to see our full line of alignment products, download spec kits, watch how-to videos and request free samples.

SEE OUR INFORMATIVE DRILLED SHAFT, WHEELS & BOOTS, AND UNIBAR VIDEOS.

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New York Office: contact Herb Engler 718.786.8814 herbengler@pieresearch.com





Quick-Lock HD™ Heavy Duty Pier Wheel

Unique One-Piece Design!

Quick-Lock HDTM installation is a snap and is designed to properly position a reinforcing steel cage in a drilled shaft. Without proper alignment, the rebar cage cannot perform the function for which it was designed.

Quick-Lock HD™ pier wheels are made of durable, noncorrosive plastic and fit numbers 3 through 7 rebar ties. They are also perfect for a variety of other applications where concrete cover must be maintained.





The table below illustrates the recommended number of Quick-Lock HD™ wheels to be used on a per shaft basis.

The actual number can vary subject to the number of vertical bars of the reinforcing steel cage.

The structural engineer is the governing authority. When in doubt, please check with the structural engineer.

RECOMMENDED QUICK-LOCK HD™ WHEELS PER REINFORCING CAGE				
Pier Shaft	Pier Shaft Diameter In Inches			
Depth In Feet	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

Part No. Description

4QLHD*	4" Quick-Lock HD™ wheel provides 2 inches of concrete cover* and fits rebar sizes #3 thru #7
6QLHD**	6" Quick-Lock HD™ wheel provides 3 inches of concrete cover** and fits rebar sizes #3 thru #7
7QLHD*	7" Quick-Lock HD™ wheel provides 3 inches of concrete cover* and fits rebar sizes #3 thru #7
8QLHD**	8" Quick-Lock HD™ wheel provides 4 inches of concrete cover** and fits rebar sizes #3 thru #7
12QLHD**	12" Quick-Lock HD™ wheel provides 6 inches of concrete cover** and fits rebar sizes #3 thru #7



Quick-Lock™ Pier Wheel

Unique One-Piece Design!

Quick-LockTM Pier Wheel installation is a snap and is designed to properly position a reinforcing steel cage in a drilled shaft. Without proper alignment, the rebar cage cannot perform the function for which it was designed.

Quick-LockTM Pier Wheels are made of durable, noncorrosive plastic and fit numbers 3 through 7 rebar ties. They are also perfect for a variety of other applications where concrete cover must be maintained.

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The table below illustrates the recommended number of Quick-Lock™ Pier Wheels to be used on a per shaft basis.

The actual number can vary subject to the number of vertical bars of the reinforcing steel cage.

The structural engineer is the governing authority. When in doubt, please check with the structural engineer.

Recommended Quick-Lock™ Wheels per Reinforcing Cage					
Pier Shaft	Pier Shaft Diameter In Inches				
Depth In Feet	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	45
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

Part No. Description

4QLPW	4" Quick-Lock™ wheel provides 2 inches of concrete cover and fits rebar sizes #3 thru #7
6QLPW	6" Quick-Lock™ wheel provides 3 inches of concrete cover and fits rebar sizes #3 thru #5
8QLPW	8" Quick-Lock™ wheel provides 4 inches of concrete cover and fits rebar sizes #3 thru #7



3PB Quick-Lock Pier Boot™



6PB Quick-Lock Pier Boot™



Quick-Zip Bar Booster™

QUICK-ZIP BAR BOOSTER $^{\text{TM}}$

Designed to support a reinforcing steel cage within a bored/drilled shaft with a 3" concrete cover requirement. Attach to rebar of any size. The zip tie used for attachment is made of 170 pound tensile strength resin. Installation is accomplished in seconds by simply positioning the Quick-Zip Bar BoosterTM on the end of a vertical bar of the cage and pulling the zip tie taut.

The recommended spacing for installation of the Pier Boot™ and Bar Booster™ is one every other vertical bar for piers under 48 inches in diameter or one on every vertcal bar for piers 48 inches in diameter and over.



Pier Boots™ & Bar Boosters™

Unique One-Piece Designs!

OUICK-LOCK PIER BOOTS™

Designed to support a reinforcing steel cage off the floor of a bored/drilled shaft. Installation is accomplished in seconds by simply pushing the Quick-Lock Pier BootTM onto the end of a vertical bar of the rebar cage.

Part	No.	Description

3РВ	3" PIER BOOT™: 3 inches of concrete cover fits rebar sizes #5 thru #14	
6РВ	6" PIER BOOT™: 6 inches of concrete cover fits rebar sizes #6 thru #14	

Quick-Lock Pier Boot™





Quick-Zip Bar Booster™





QUICK-LOCK™ UNIBAR™ CENTRALIZERS

The answer to uniform reinforcement steel spacing requirements in single-bar foundation/tiebackelements. To achieve proper design strength in any drilled and grouted/concreted hole, the tendon/rebar or anchor material must be centered in the shaft to allow minimum coverage throughout the length of the element.

APPLICATION

QUICK-LOCK™ UNIBAR™ CENTRALIZERS are designed to keep the tendon/bar centered in the bore/drill hole to allow for minimum grout/concrete coverage and do not impede flow of grout within bore/drill hole and around tendon. They are made of durable non-corrosive plastic and consisting of two identical halves that are fast and easy to together. QUICK-LOCK™ UNIBAR™ snap CENTRALIZERS will accommodate Single Bar, Multi-Bar/Strand Anchors, Encapsulated (DCP) Anchors, and Steel or Plastic Pipe Applications. They are ideal for Soil Nails, Rock/Soil Anchors, Micro-Piles, and Auger-Cast Piles with single tension bars.

ADVANTAGES

- •2 identical halves
- easy to snap together
- •made of durable non-corrosive plastic
- •can be attached with zip ties or tie wire
- offset to fit between rebar threads
- keeps single tendon/bar centered within a drill hole
- •ideal for soil nail applications
- •no nuts or bolts required
- •lightweight and economical

ASSEMBLY

Quickly assemble the QUICK-LOCKTM UNIBARTM CENTRALIZER by easily snapping the two identical halves together over the tendon/rebar and either tying it on with tie wire, or with a zip tie threaded through the end tab slots.

PLACEMENT

The lowest QUICK-LOCKTM UNIBARTM CENTRALIZ-ER should be installed approximately 1 foot from the end of the tendon/bar material. Each successive QUICK-LOCKTM UNIBARTM CENTRALIZER should be placed at no greater than 10-foot intervals. The upper QUICK-LOCKTM UNIBARTM CENTRALIZER should be approximately 1 feet below grout/concrete surface.

Revolutionary New Quick-Lock Unibar Centralizers

Soil Nailing - Tendon/Rebar Alignment Support



Part No.	Description
4-6UBC	4" O.D. fits rebar sizes #5 thru #6
4-8UBC	4" O.D. fits rebar sizes #7 thru #8
4-1.5IN-UBC	4" O.D. with 1.5" I.D. Hub
6-6UBC	6" O.D. fits rebar sizes #5 thru #6
6-8UBC	6" O.D. fits rebar sizes #7 thru #8
6-1.5IN-UBC	6" O.D. with 1.5" I.D. Hub

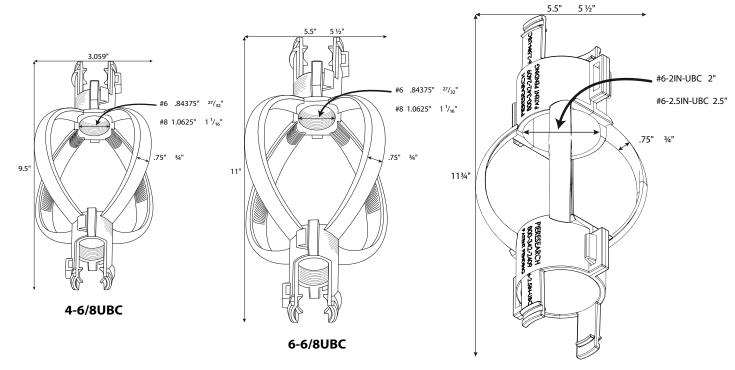
Part No.	Description
4-2IN-UBC	4" O.D. with 2" I.D. Hub
4-2.5IN-UBC	4" O.D. with 2.5" I.D. Hub
6-2IN-UBC	6" O.D. with 2" I.D. Hub
6-2.5IN-UBC	6" O.D. with 2.5" I.D. Hub



See the following page for more Unibar™information

NEW SIZES!

PATENT NO. 1015113



6-2IN/2.5IN-UBC

PIERESEARCH UNIBAR SPECS • SECTION 31 32 39 SOIL NAILING ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

Section Includes: Soil nailing tendon accessories indicated, specified, or required to complete installation.

1.2 SUBMITTALS

- Product Data: Manufacturers technical literature for each type of manufactured material and product specified.
- 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

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.

2.2 TENDON CENTRALIZERS (QUICK-LOCK™ UNIBAR™ CENTRALIZERS)

- A. Description:
 - 1. Centralizer is made of plastic and are two identical halves that can be easily snapped together around soil nail tendon.
 - 2. Centralizer keeps soil nail tendon centered in drilled shaft and does not impede flow of grout/concrete.
 - Centralizer Part Number:

NOTE TO SPECIFIER: SELECT ONE OF THE FOLLOWING OPTIONS

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Part No.		Description	
	4-2IN-UBC	4" O.D. with 2" I.D. Hub	
	4-2.5IN-UBC	4" O.D. with 2.5" I.D. Hub	
	6-2IN-UBC	6" O.D. with 2" I.D. Hub	
	6-2.5IN-UBC	6" O.D. with 2.5" I.D. Hub	

42 per box. Box weight approx. 15 pounds. 1,470 parts per pallet.

Part No. Description 4-6UBC 4" O.D. fits rebar sizes #5 thru #6 4-8UBC 4" O.D. fits rebar sizes #7 thru #8 4-1.5IN-UBC 4" O.D. with 1.5" I.D. Hub 6-6UBC 6" O.D. fits rebar sizes #5 thru #6 6-8UBC 6" O.D. fits rebar sizes #7 thru #8 6-1.5IN-UBC 6" O.D. with 1.5" I.D. Hub

60 parts per box. Box weight approx. 14 pounds. 1,800 parts per pallet.

EXECUTION

2.3 INSTALLATION

- Attach centralizers to soil nail tendon according to manufacturer's instructions.
- Snap two identical halves together around tendon and secure with tie wire or zip tie.
- C. Attachment Locations:
 - 1. At deep end of drilled shaft, attach centralizer at approximately 1 foot from end of the soil nail tendon.
 - 2. Attach centralizer at maximum 10 foot intervals along total length of soil nail tendon.
 - At access end of drilled shaft, attach centralizer so that it will be approximately 1 foot below grout/concrete surface.
- D. To prevent sliding, secure centralizer to soil nail tendon with tie wire or zip tie threaded through end tab slots.



PIERESEARCH IS A PROUD MEMBER OF THESE PROFESSIONAL ASSOCIATIONS:







American Concrete Institute

Always advancing

Northeast Texas Chapter





Structural Engineers Association Oklahoma