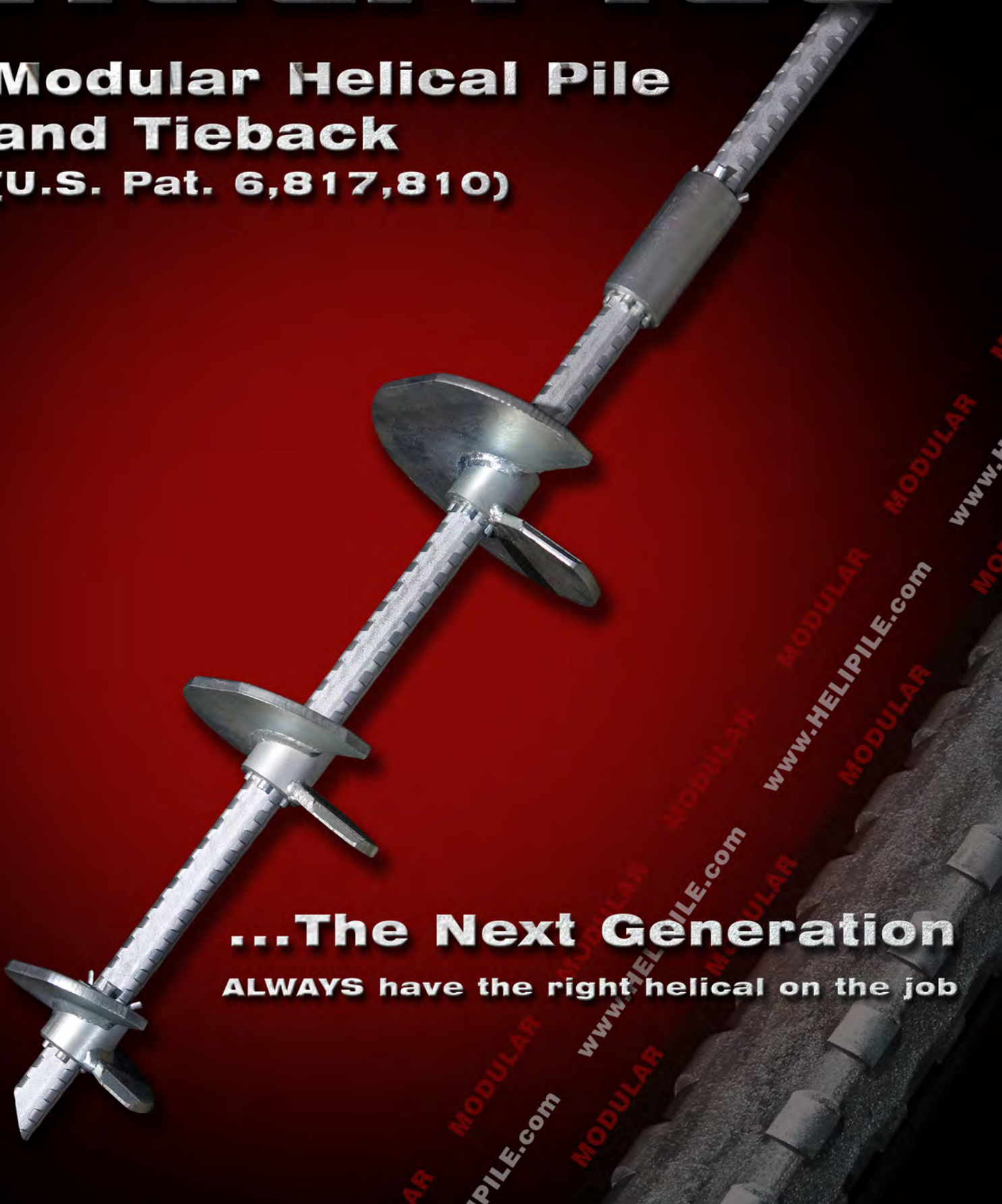


HELI-PILE®

**Modular Helical Pile
and Tieback**
(U.S. Pat. 6,817,810)



...The Next Generation
ALWAYS have the right helical on the job

MODULAR:

- **Every pile or anchor can be quickly field configured to match site conditions**
- **Easy and economical to inventory the RIGHT material**
- **Eliminates ALL the disadvantages of previous systems**
 - **No more “fixed length” or “fixed helix” problems**
 - **Simplifies transportation and storage**
 - **Developed, tested, proven and patented by experienced engineering contractors**
 - **Over ten years in research and development**
- **Eliminates the loose “weak link” bolted coupling concerns of all other systems**
- **Promote reliability and economy by ALWAYS installing the correct pile or anchor**
 - **Load transfer becomes simple in tension and compression**

HELI-PILE®

Shaft



Nut



Coupler



Coupler Keys



Helix



Helix Keys

Modular Componets

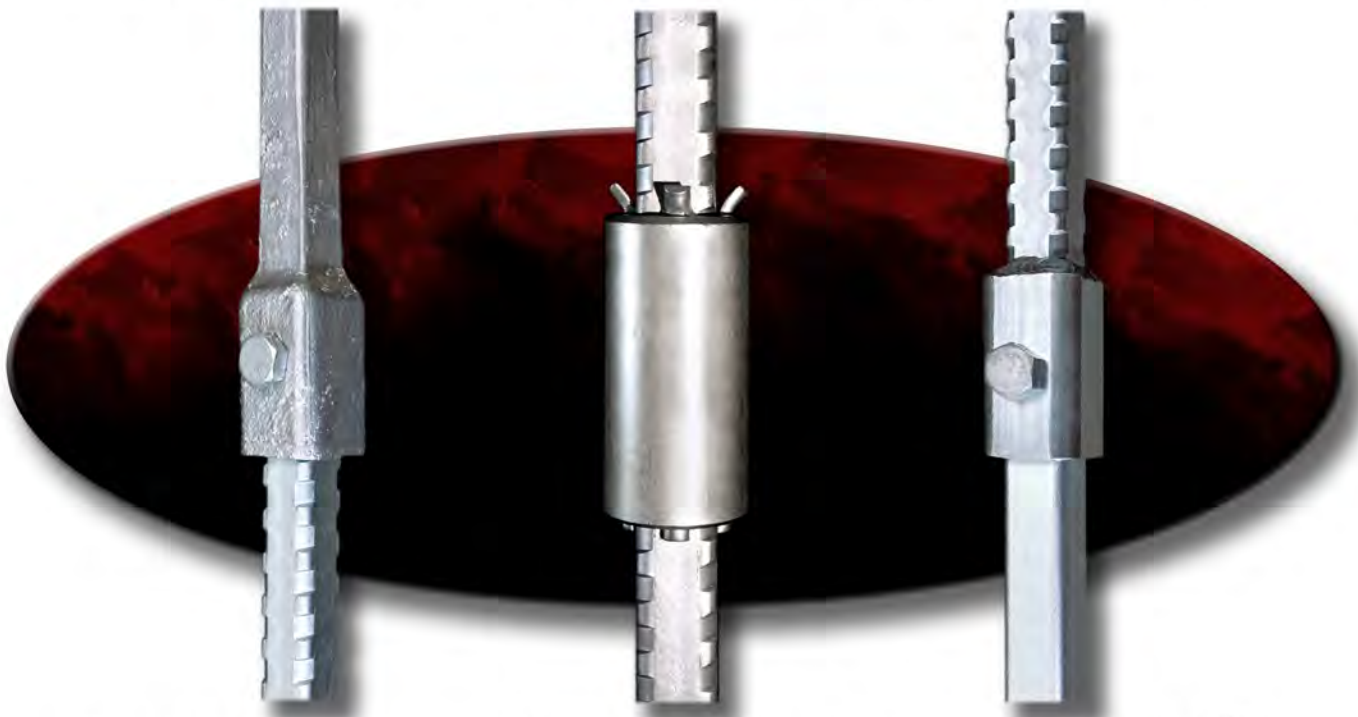


**Helix Module
attached to Shaft**

- **Load transfer hardware designed specifically for HELI-PILE®**
- **Provides a complete patented system for new construction or retrofit**
- **Unlimited sizes and capacities for all commercial and residential applications**
- **All helix modules use 1/2" thick high strength (80 ksi) steel**
- **All helix leading edges sharpened and rock cut**
- **All components are zinc coated per ASTM B633**

**The modular HELI-PILE® uses shaft modules, helix modules, coupling modules and termination modules that allow the contractor to adapt HELI-PILE® to soil conditions
No "wrong material" delays nor "compromise" installations**

HELI-PILE® is totally compatible with conventional extensions



**Conventional
extension with
HELI-PILE®
lead shaft option**

**HELI-PILE® Shaft
Coupling Module**

**HELI-PILE®
termination
with conventional
extension option**



HELI-PILE® Installation



**Shear Pin
Torque Indicator**

HELI-PILE® installation techniques are the same as with all helical screw piles and anchors, tractor or hand carried: same drive heads, same drive tools and the same torque indicators.





HELI-PILE® is the perfect answer for tiebacks. Eliminates the need for threaded adapters thus simplifying tieback termination.

Eliminates the loose “weak link” bolted coupling concerns of other systems.

HELI-PILE® Tieback



**Helical Tieback Project
IMR Proprietary Engineered Shoring Panels**



The UP-150 series underpinning brackets (U.S. Patent 5,800,094)

- Easy to install
- No special jacking tools
- Low profile, no protrusions
- 100,000 lbs minimum ultimate capacity

HELI-PILE® Underpinning Bracket Installation

HELI-PILE® Termination Options



UP-150 Underpinning Bracket



New Construction Rebar Cap



New Construction Plate Cap

Heli-Pile® Modular Helical Pile

EASY DESIGN AND ORDER GUIDE

STEP 1: SELECT LEAD SHAFT

If the ultimate load* is:	Select Lead Shaft	Cat. No.	Lengths
0 to 55,000 lbs	1.5 inch high strength steel	HPL-15	3 ft, 5 ft, 7 ft
0 to 70,000 lbs	1.5 inch extra-high strength steel	HPL-15X	3 ft, 5 ft, 7 ft
0 to 100,000 lbs	1.75 inch extra-high strength steel	HPL-175	3 ft, 5 ft, 7 ft

*The ultimate load is the design load multiplied by the factor of safety, usually 2.

STEP 2: SELECT EXTENSION SHAFT

If the ultimate load* is:	Select Extension Shaft	Cat. No.	Lengths
0 to 55,000 lbs	1.5 inch high strength steel	HPE-15	3 ft, 5 ft, 7 ft
0 to 70,000 lbs	1.5 inch extra-high strength steel	HPE-15X	3 ft, 5 ft, 7 ft
0 to 100,000 lbs	1.75 inch extra-high strength steel	HPE-175	3 ft, 5 ft, 7 ft

*The ultimate load is the design load multiplied by the factor of safety, usually 2.

STEP 3: SELECT NUMBER OF HELICES

1.5 inch high strength shaft:	0 to 55,000 lb ultimate load, use 1 helix minimum.
1.5 inch extra-high strength shaft:	0 to 70,000 lb ultimate load, use 1 helix minimum.
1.75 inch extra-high strength shaft:	0 to 70,000 lb ultimate load, use 1 helix minimum. 70,000 to 100,000 lb ultimate load, use 2 helices.

Select Helix Catalog Numbers from this chart:

Helix Diameters (All helices ½ inch thick)	Helix Catalog Numbers For Either 1.5 Inch Shaft	Helix Catalog Numbers For 1.75 Inch Shaft
6 inch	HPH-15X-06	HPH-175-06
8 inch	HPH-15X-08	HPH-175-08
10 inch	HPH-15X-10	HPH-175-10
12 inch	HPH-15X-12	HPH-175-12
14 inch	HPH-15X-14	HPH-175-14

(4 keys are included with each helix.)

STEP 4: SELECT LOAD TRANSFER HARDWARE

Load Transfer Hardware	Catalog Numbers 1.5 inch Shaft	Catalog Numbers 1.75 inch Shaft
Rebar Cap	HP-15X-RC	HP-175-RC
Plate Cap	HP-15X-PC	HP-175-PC
Underpinning Bracket	UP-150	UP-175

STEP 5: SELECT COUPLINGS

For either 1.5 inch shaft:	Select HPC-15X (4 keys are included with each coupling)
For 1.75 inch shaft:	Select HPC-175

STEP 6: ORDER

1. Call us at (303) 423-0591
2. Fax order to (303) 423-9155

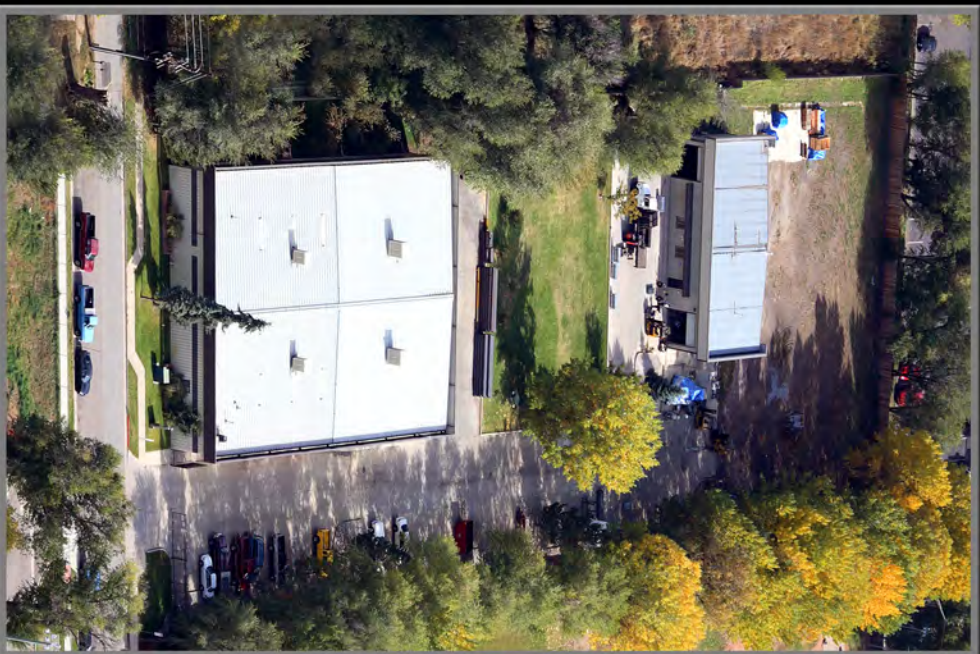
Questions? Need Help? Want us to figure your order?

Call us at (303) 423-0591

Email us: info@heli-pile.com

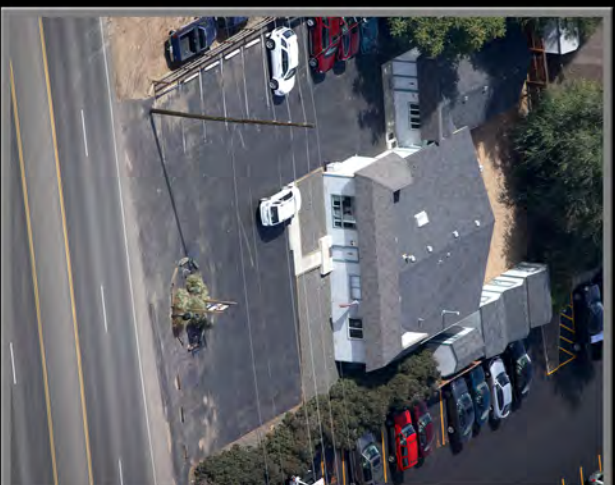


**INTERNATIONAL
MARKETING &
RESEARCH, INC.**



Helipile® Manufacturing Plant

Arvada, Colorado



IMR World Headquarters

5135 Ward Road
Wheat Ridge, Colorado 80033
USA

Phone: 303-423-0591
Fax: 303-423-9155
Email: info@helipile.com

www.HELIPILE.com

Denver, Colorado



**Engineering Test Lab
Custom Fabrication
Distribution**

Golden, Colorado

Proudly Made In The USA

