

# ***Grip-Tite***<sup>®</sup> **Foundation Systems**

## **PRODUCT CATALOG**

Email Orders To:  
**orders@griptite.com**

Call: 1-800-474-7848

Fax: 515-462-3465

# PRODUCT PROPERTIES TECHNICAL KEY

Grip-Tite has been manufacturing high-quality, earth anchoring and foundation repair products in Winterset, IA continuously since 1921. We can proudly state that all of our products are “Made in the USA”. Certified welders, constant quality improvement programs and exacting quality control procedures ensures the highest quality products with proven performance for over 90 years.

A network of certified installers/dealers, effectively cover all 50 states, Canada and Mexico. These installers undergo an extensive, in-house training and certification in order to provide safe and effective product installations. Those products are tested in-house, at third party, independent, certified laboratories and in the field before they are put into production. You can be assured of a pre-engineered, reliable solution to your earth anchoring and foundation repair needs with Grip-Tite.

Grip-Tite has obtained, and maintained, ICC Legacy Evaluation Service Reports and IAPMO Evaluation reports for both Helical & Push Pier Systems. We have also tested both products in accordance with ICC Test Criteria AC358 through an ICC certified laboratory.

Our support staff provides engineering, product and customer support to the dealer network and the engineering and building communities. Our field support includes job site and installation oversight, load tests and product development. We look forward to the opportunity to serve your earth anchoring and foundation repair needs.

Grip-Tite performance.....over 90 years and counting!

# Wall Anchor System

## The Solution for Bowing Basement Walls

The Grip-Tite® Wall Anchor System utilizes proven engineering methods to secure and stabilize deteriorating basement walls. Bowed, cracked or leaning basement walls are a sign that the structural integrity of your property is at risk. This happens when hydrostatic pressure from too much water building up against the walls, saturating the soil around the basement wall causing the soil to swell and exert pressure that forces the foundation wall inward. The system works on any kind of basement wall - concrete block, clay block, poured concrete, timber, or stone.

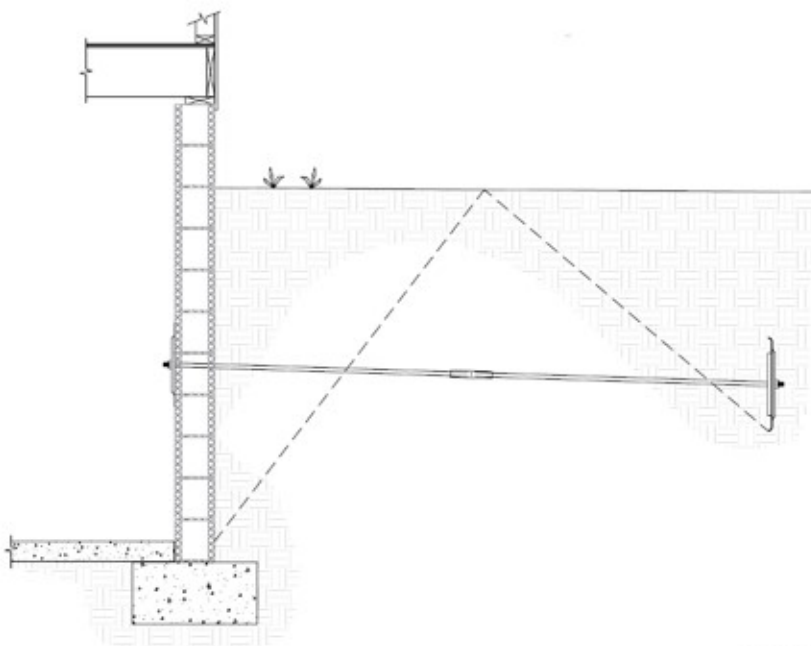
The system consists of an interior wall plate, an exterior soil anchor and a connecting steel rod to stabilize foundation walls by counteracting pressure exerted against the wall.

The system is a property owner's alternative to completely removing and rebuilding basement walls that have become cracked, leaning or bowed as a result of pressures exceeding the allowable design capacity of the wall.

The Grip-Tite® Wall Anchors are spaced along a wall and rod extenders can be used to avoid decks, flowerbeds, landscaping or other obstacles.

## Specifications

- \* Allowable Rod Capacity = 8,400 lbs.
- \* Wall Plate: 10 gauge (0.134-inch thick) hot-rolled, embossed steel plate. Available in standard plate (approx. 195 sq. in.) or large plate (approx. 300 sq. in.).
- \* Earth Anchor: Two cross-plated 10 gauge (0.134-inch thick) hot-rolled, embossed steel plates.
- \* Anchor Rods: nominal diameter 0.734 inch with rolled threads in 6.5 foot sections.
- \* Corrosion Resistant: wall anchor components hot-dipped galvanized in accordance with ASTM A-153.



**Grip-Tite®**  
WALL ANCHOR SYSTEM

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# GTSQ3x3-0313 SERIES

## HSS SQUARE TUBE HELICAL PILES

### 120 kip Ult. Compressive Capacity Torque

## STEEL SPECIFICATIONS

Shaft (ASTM A500 Grade C)	HSS 3" x 3" x 5/16" wall Fy = 50 ksi min., Fu = 62 ksi min.
Cross-Sectional Area A	2.94 in <sup>2</sup>
Moment of Inertia, I	3.45 in <sup>4</sup>
Section of Modulus, S	2.30 in <sup>3</sup>
Circumference, c	12.0 in
Radius of Gyration, r	1.08 in
Coupling (ASTM A500 Grade B)	HSS 4" x 4" x 3/8" wall x 7" long Fy = 50 ksi min., Fu = 62 ksi min.
Connecting Bolt (Zinc coated per ASTM B633 or B695)	
Helices (ASTM A36)	Thickness - 0.375" and 0.50"; 8", 10", 12" 14" Diam Fy = 36ksi min., Fu = 58 ksi min.
Corrosion Protection	Hot-Dip Galvanized per ASTM A123

Ultimate Capacity-to-Torque Ratio, K	10 ft-1
Recommended Torsional Strength, T	12,000 ft-lbs
Ultimate Mechanical Capacity Compression and Tension	Compression 160 kips, Tension 80 kips (10)
Allowable Mechanical Capacity Compression and Tension	Compression 80 kips, Tension 40 kips (1) (2)
Allowable Shear Capacity	25 kips
Allowable Bending Capacity	5 ft-kips
Ultimate Capacity - by Torque Compression and Tension	Compression 120 kips, Tension 70 kips (1)
Allowable Capacity - by Torque Compression and Tension	Compression 60 kips, Tension 35 kips (1) (2)

HELIX DIAMETERS	NET HELIX AREA AND ULTIMATE HELIX MECHANICAL CAPACITY
8	0.25 ft <sup>2</sup> , 70 kips
10	0.45 ft <sup>2</sup> , 70 kips
12	0.70 ft <sup>2</sup> , 70 kips
14	0.96 ft <sup>2</sup> , 56 kips

(1) Load test may be required to verify actual geotechnical capacities. A factor of safety greater than 2 may be necessary to meet project settlement and deflection tolerances. Settlements and deflections are estimated to be less than 1/2 inch for helical piles designed using the above allowable capacities. The actual capacity of the pile should take in account the bracket, eccentricity of the load, unbraced length of the pile (above and below ground) and soil strength conditions along the entire shaft length.

(2) Minimum factor of safety of 2 is recommended.

(3) The above capacities represent Helical Piles supporting a fully braced foundation in stiff soils. Estimated minimum 50 year design capacities for galvanized material.

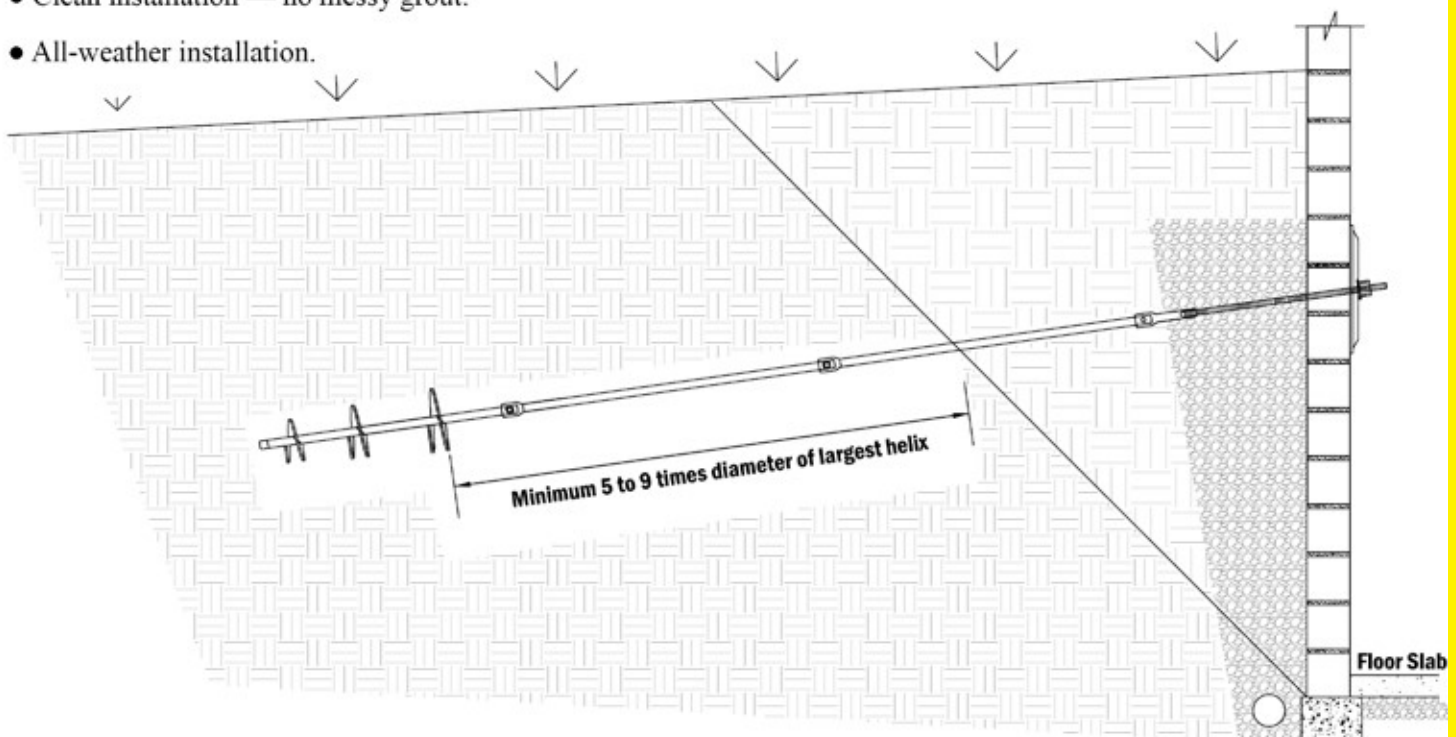
# GTRDS150/GTRDS175 SERIES SQUARE SHAFT HELICAL TIEBACKS



1" Threadbar Adapter

## ADVANTAGES

- Predictable capacity.
- No excavation required on the high-grade side of foundation or retaining walls.
- Extensions added as necessary to achieve pre-determined capacity.
- Installs with either portable or "small" equipment.
- Installs in areas of limited or tight access.
- Load test can be conducted immediately after installation.
- Generates no spoils.
- Clean installation — no messy grout.
- All-weather installation.



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Foundation Pier System

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