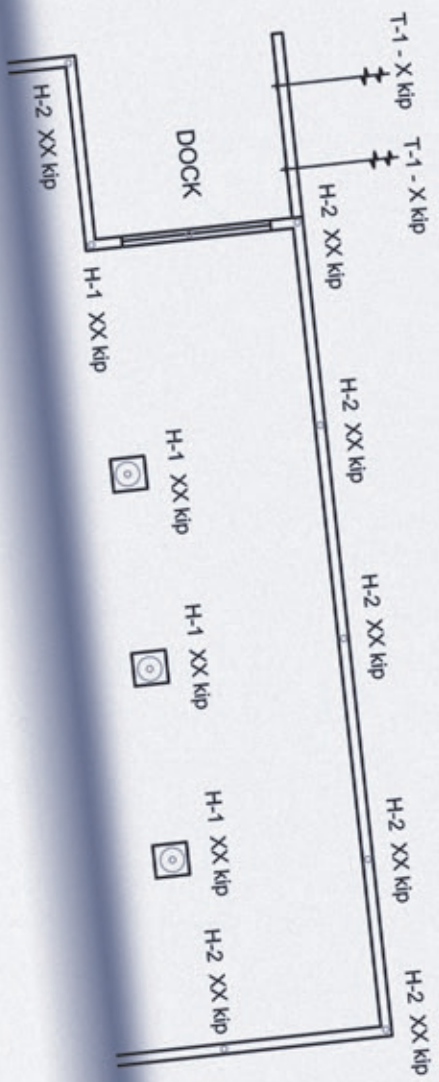
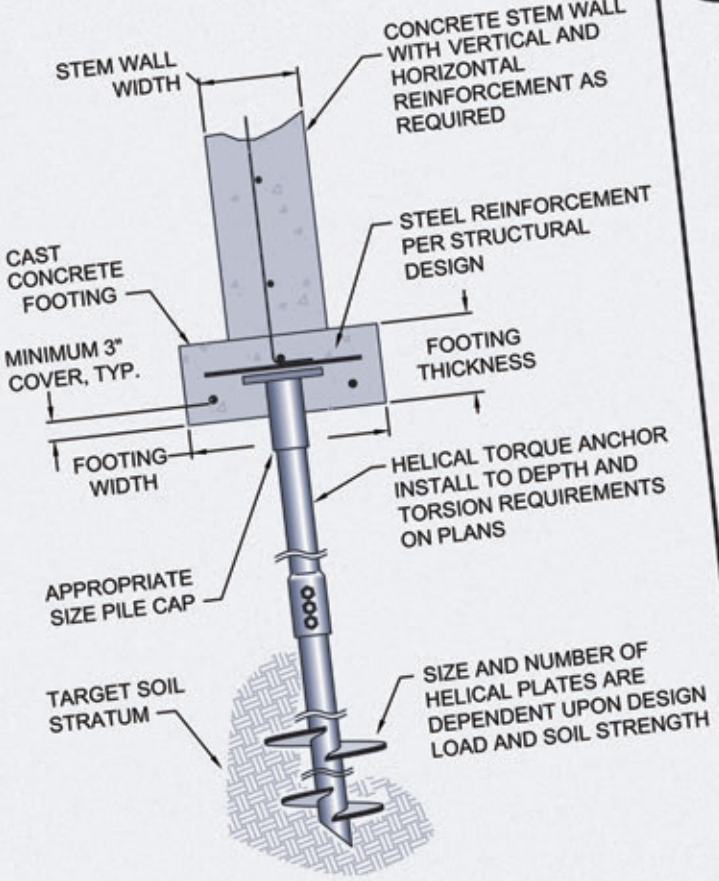
ECP Helical Torque Anchors™

The Very Best!





Earth Contact Products
15612 South Keeler Terrace • Olathe, Kansas 66062
913-393-0007 • www.earthcontactproducts.com

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"Designed & Engineered to Perform."

History

EARTH CONTACT PRODUCTS, L.L.C., is a family owned company, based in Olathe, Kansas. This company was built upon Don May's U.S. Patented fourth-generation Steel Piering System that has led to the development of other foundation repair products.

Today, ECP has a complete product line of Steel Piers and Helical Torque Anchors. These products provide "The Very Best" solutions to residential, commercial or industrial foundation problems.

Our 70,000 square feet state of the art fabrication facility, with Robotic welding and CNC capabilities and certified welders, enable ECP to custom configure products to fit Engineer Specific projects.

Mission Statement

Earth Contact Products, L.L.C., is the original equipment manufacturer of the U.S. Patent and Trademark Office protected, fourth-generation ECP Steel Pier™ System, Helical Torque Anchor™, and related accessories. Earth Contact Products will always use the newest technology and innovation to serve our Contractor/Installers and will never compromise quality or material or premium workmanship while providing unparalleled product and service to our Customers. Earth Contact Products creates long-term business partnerships with Companies of the same ideals and philosophies for mutual success.

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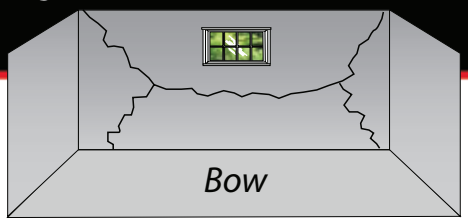
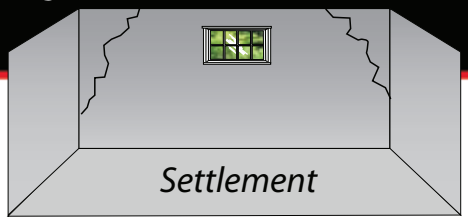
"Designed and Engineered to Perform"

Diagnosing Wall Cracks

1. Angled and Horizontal

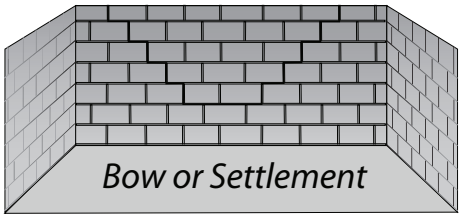


2. Angled

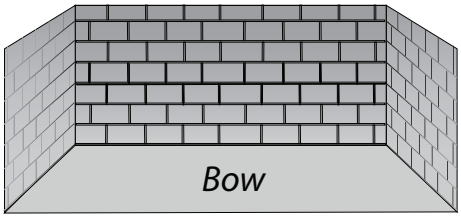


3. Vertical and Horizontal

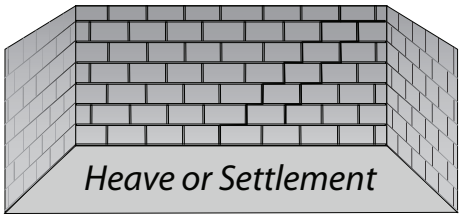
4. Center Converging



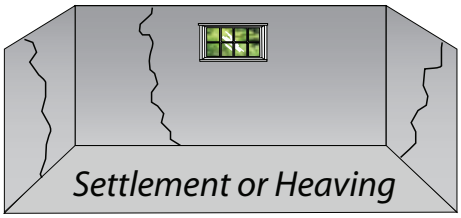
5. Horizontal



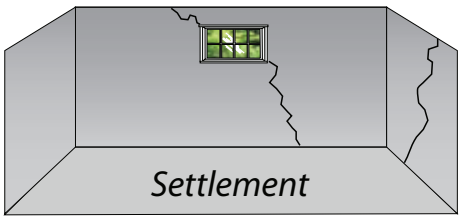
6. Stair Step



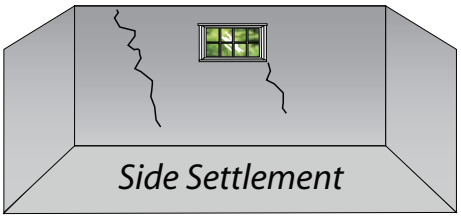
7. Vertical



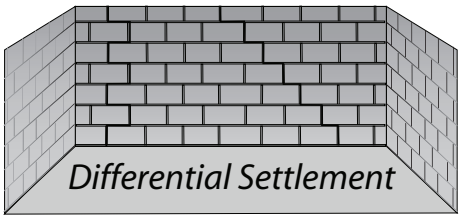
8. Vertical



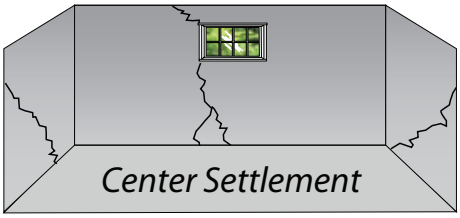
9. Vertical wider at top



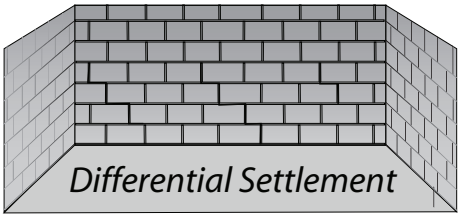
10. Wider at top than bottom



11. Vertical wider at bottom

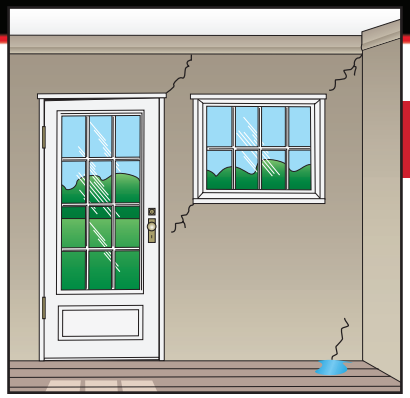


12. Stair Step



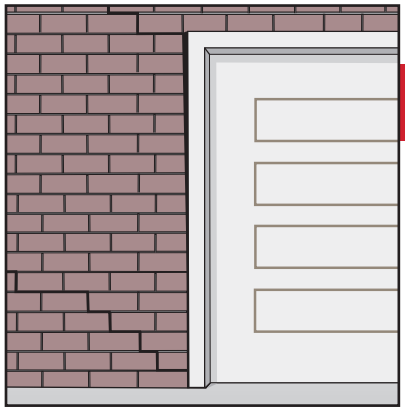
Signs of Foundation Failure

Know the signs before it's too late.



Your Home's Interior

- Cracks in drywall
- Doors and windows that stick
- Misaligned doors and windows
- Trim or molding misaligned
- Water leakage through cracks at base of walls



Your Home's Exterior

- Cracks in brickwork
- Gaps around doors and windows
- Fascia board pulled away
- Leaning or tilted chimneys

Your Basement

- Foundation seepage
- Cracks in walls
- Bowed walls
- Sinking foundation

Causes of Foundation Failure
Why is it happening?

Evaporation
Hot and dry conditions may cause soil to pull away from the foundation. Settlement due to this foundation moisture imbalance could cause cracks to appear throughout the structure.

Transpiration
Tree roots could dehydrate the soil beneath a home causing soil shrinkage and settlement of the home.

Plumbing Leaks
Water from leaky plumbing is often a major contributor to foundation problems.

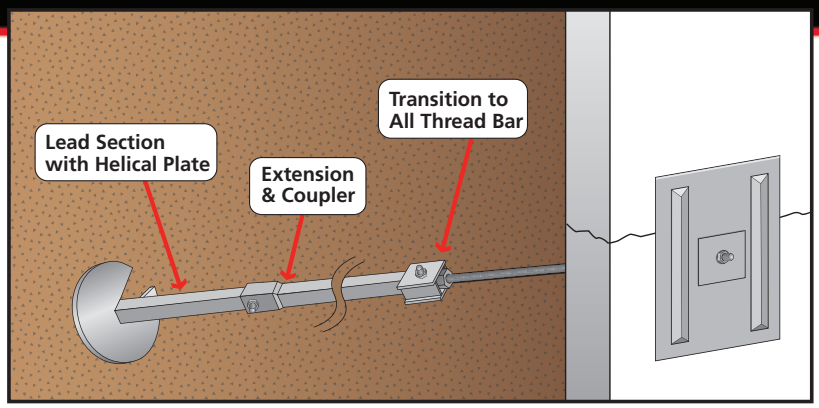
Drainage
Improper drainage will lead to excess moisture build up, which could erode or consolidate soils. Excessive moisture may cause upheaval or settlement.

Poor Building Site Preparation
Cut and fill situations, where soil is removed from part of the lot and stacked on another, must have proper soil stabilization before the structure is constructed; otherwise unexpected movements of the soil beneath the foundation may occur.

Poor Ground Preparation
Cut and fill situations should be properly prepared before structure is started or it may result in improperly compacted soil beneath the foundation.

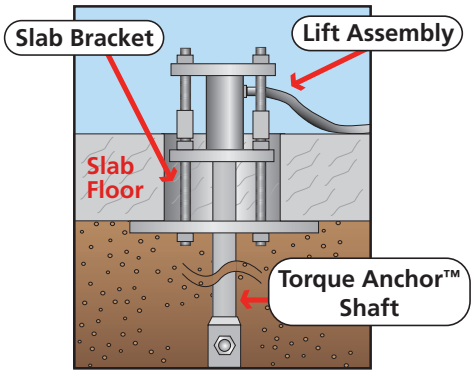
Poor Soil Conditions
Poor soil, organic components, debris, etc., may cause expansion or consolidation, which contribute to foundation failures.

ECP Helical Torque Anchor™ Products



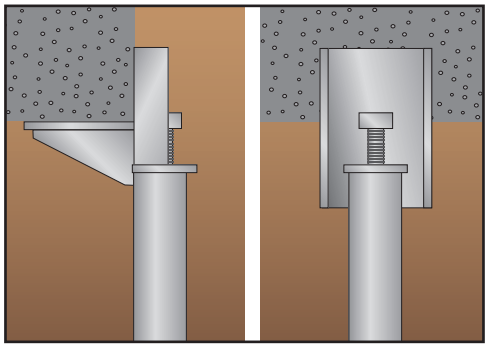
Basement Tieback Anchor

Designed to stabilize and strengthen bowed or cracked basement walls on existing structures. It is also possible to pull the wall back into proper alignment by excavating the soil on the exterior prior to tensioning the tieback anchors.



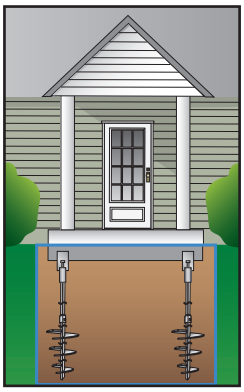
Hydraulic Lift Slab Pier

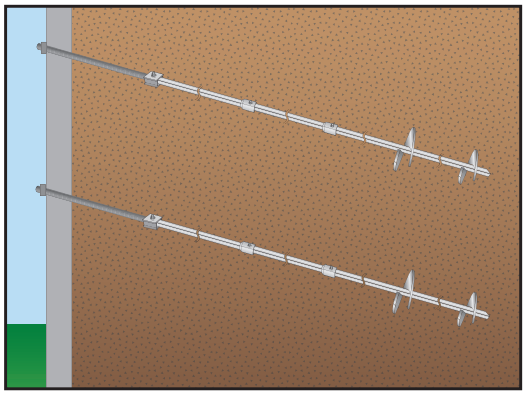
- Hydraulic lifting of large areas
- Used for commercial and residental
- Mechanical version also available



Porch Pier

- Designed for light structures
- Used for porches & wing walls



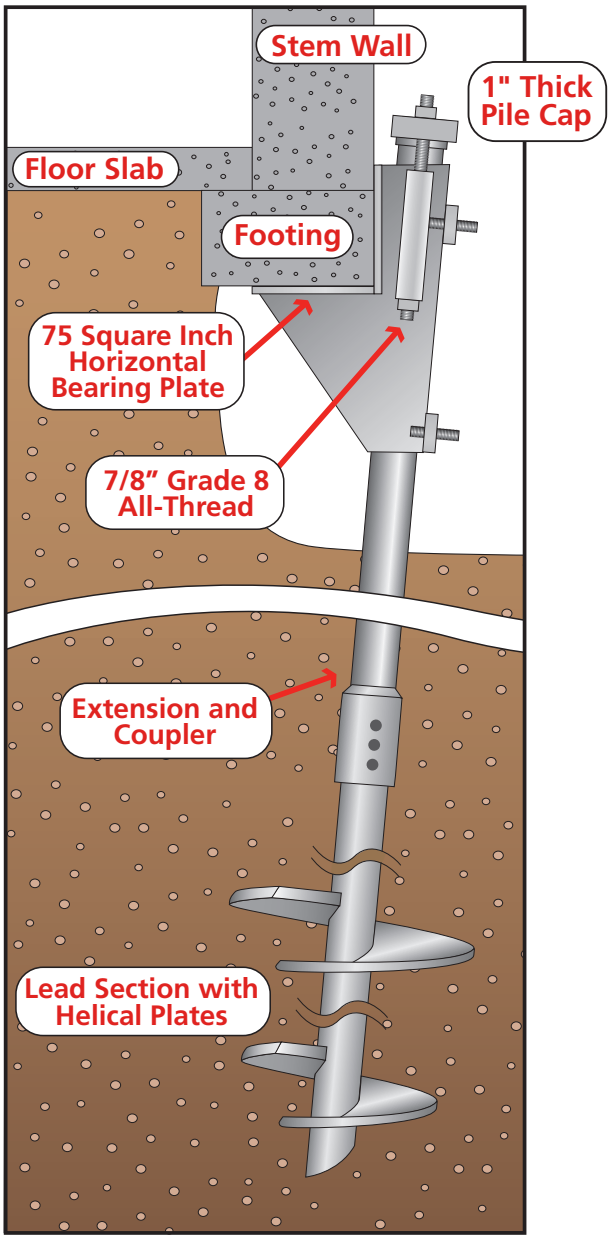


Retaining Wall Tiebacks

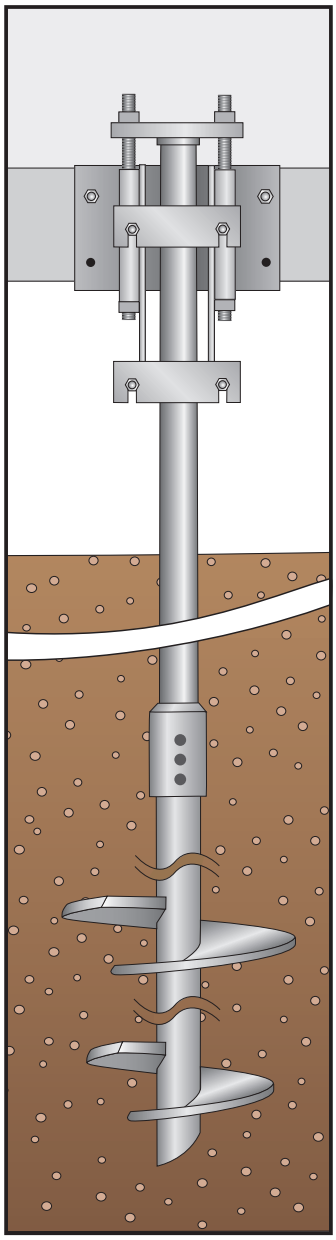
Helical Torque Anchors™ are installed to support new retaining walls or to create additional holding capacity for existing walls.Helical Torque Anchors™ size and load requirements are engineered specific.

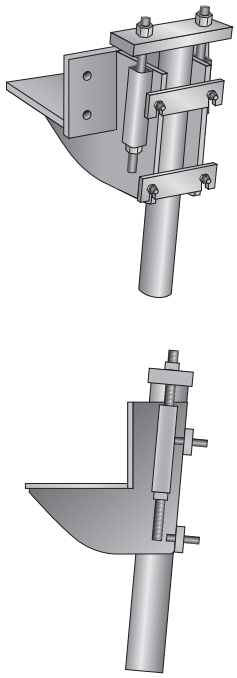
ECP Helical Torque Anchors™

Side View



Front View



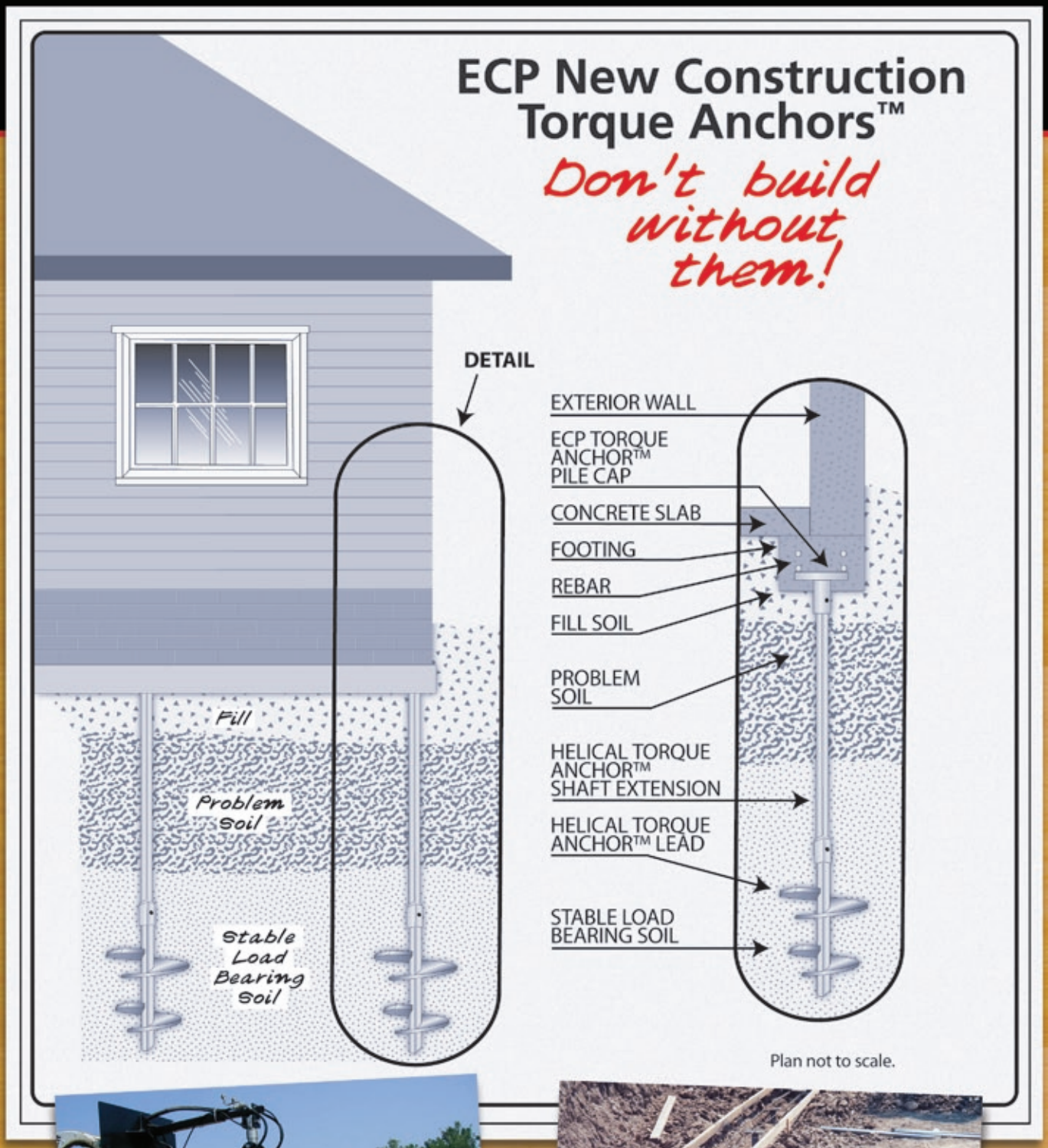


Torque Anchor™ Utility Bracket

This general purpose bracket attaches to existing foundations and is used to restore existing structures.

ECP Torque Anchor™ Brackets can be installed in either interior or exterior locations. ECP Torque Anchor™ Brackets stop settlement and provide structural lift. They can close cracks in masonry and restore other flaws such as separations at door and window frames caused by the settlement. Specific information involving the original structural design, current foundation condition, soil characteristics and site survey must be considered for the final repair plan. Designing a restoration project should involve professional engineering input.

ECP Helical Torque Anchors™

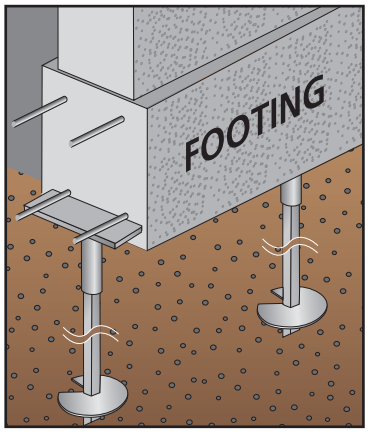


Prevent Foundation Settlement

New Construction

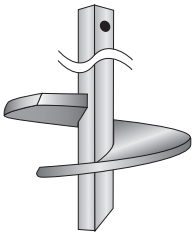
"Don't Build Without Torque Anchors™!"

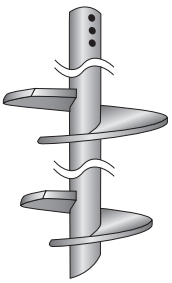
- **Prevent Future Foundation Settlement.**
- **Protect Your New Home Investment.**
- **Save Money Now by Preventing Expensive Future Foundation Repair!!**

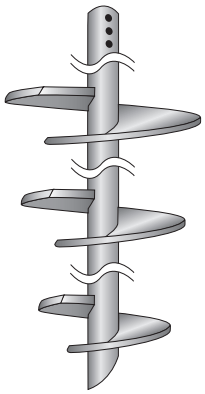


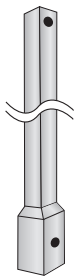
New Construction Foundation Support
Placed on anchors below the footing and tied to rebar before concrete is poured. Helical Torque Anchor™ size and load requirement are engineered specific.

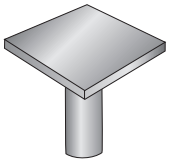
"Don't Build Without Torque Anchors™!"


Single Lead
TAH-150

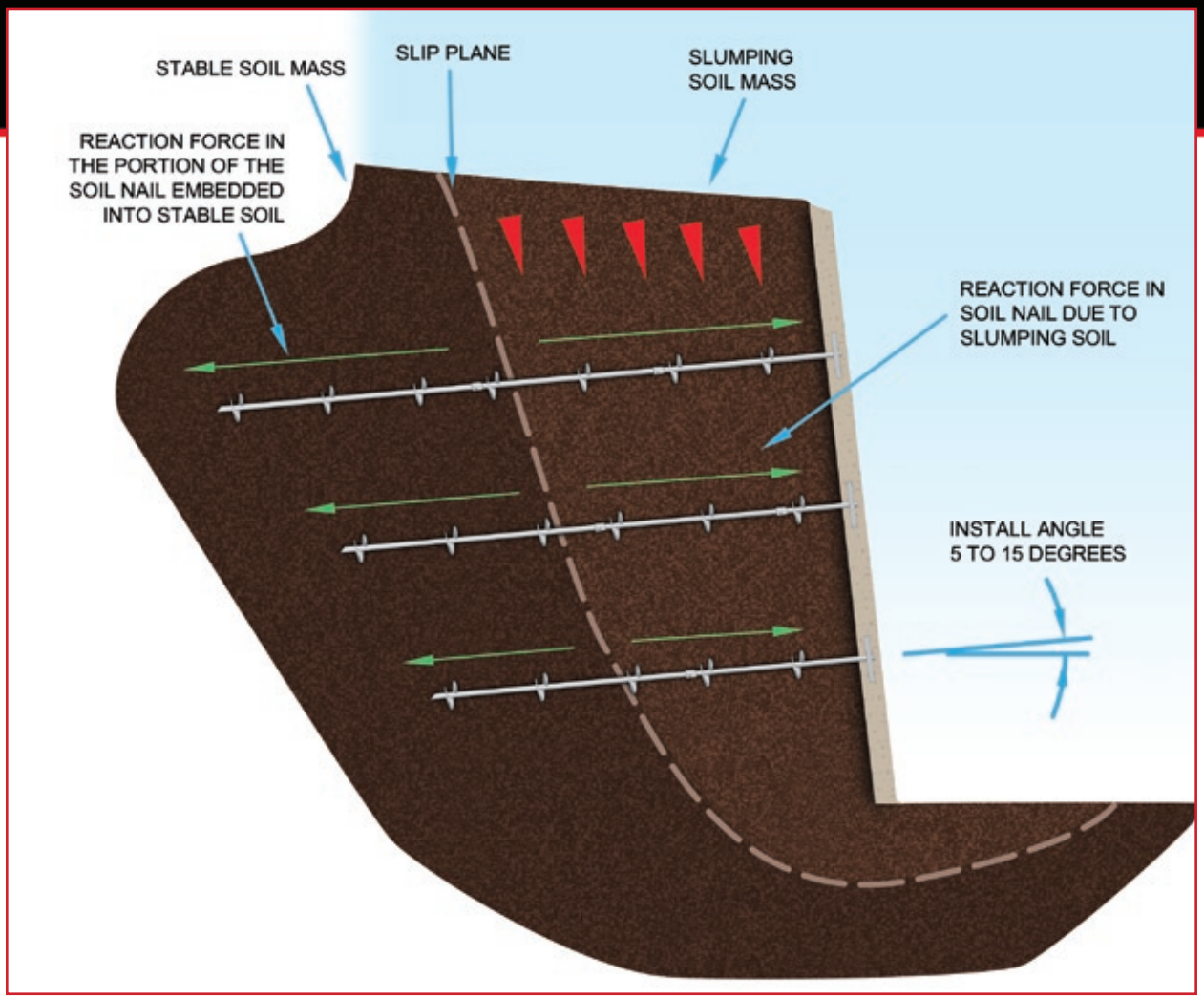

Double Lead
TAF-288


Triple Lead
TAF-288


Extension
TAE-150


Pile Cap
TAB-150-NC

Soil Nails



In many construction projects soil nails are used to retain the unstable soil mass. To accomplish this, soil nails are installed in an evenly spaced close geometric pattern. When installing a soil nail stabilization project, the soil nail installations and the excavation must be accomplished in incremental depths of 4 to 6 feet until the final depth of cut is accomplished. Usually only one increment can be completed per day. Immediately following the incremental excavation of the soil and the soil nail installations, the vertical face of the soil is covered with a steel reinforced coating of shotcrete.

Soil nails are passive structural elements and are not tensioned after installation. The soil nail gains pullout resistance from within the sliding soil mass in front of the slip plane and the stable soil mass located behind the slip plane. The geometric system of soil nail placements creates an internally reinforced soil mass that is stable.
Notice that each soil nail shaft has a great number of helical plates with the same diameter. These helical plates are evenly spaced along the entire length of the shaft. By comparison, a tieback anchor has one or more helical plates situated at the tip of the tieback. These helical plates generally increase in diameter along the shaft away from the tip. Once a tieback anchor lead section is installed, extensions without helical plates are used to extend the helical plates at the tip to the target depth. Soil nails, on the other hand, will always have identical evenly spaced, small diameter helical plates along the entire shaft from beginning to end.

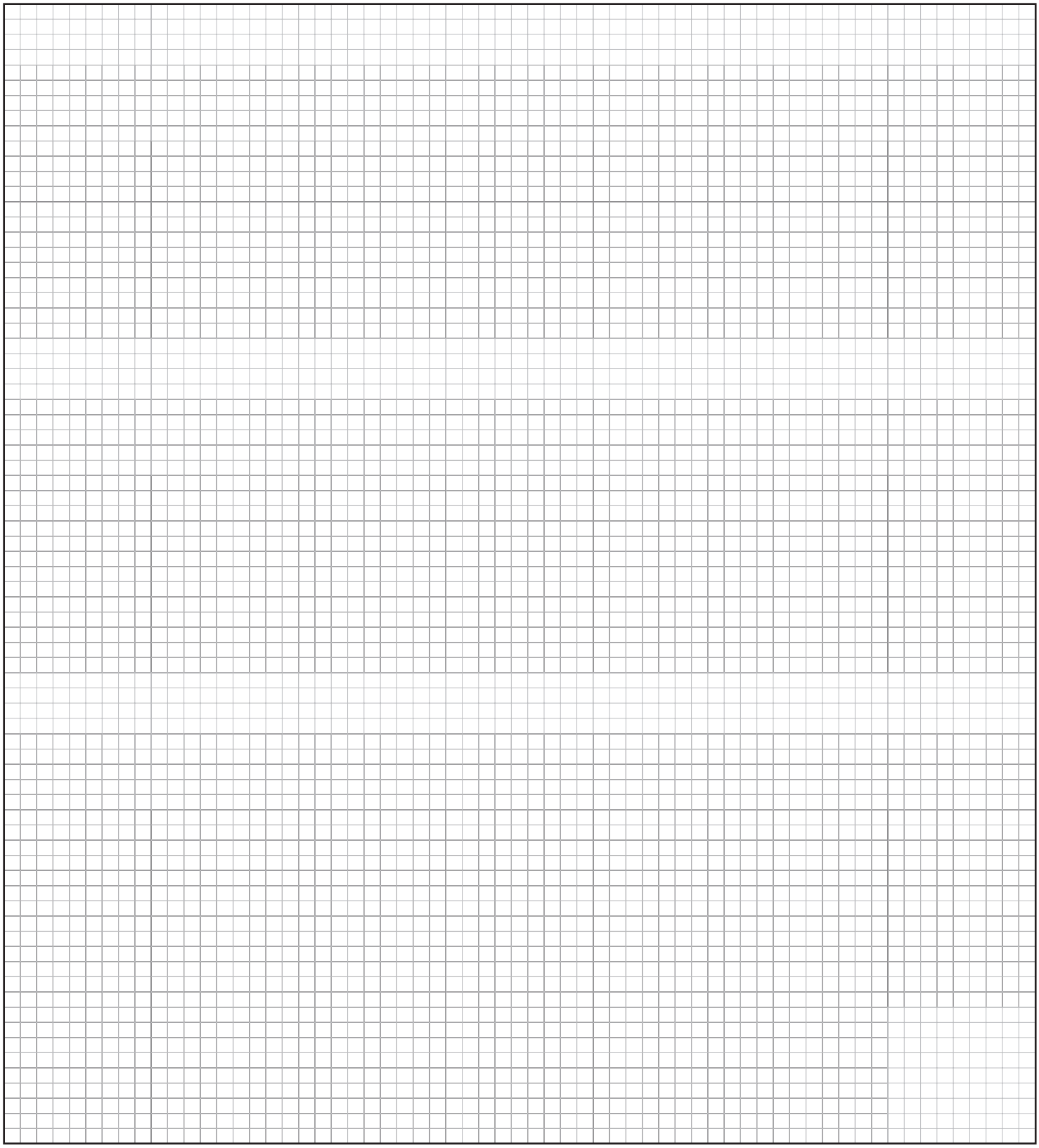
Soil nails may be the product of choice in applications where the vibrations from installing sheet piling or "H" piles may cause structural distress to nearby structures. Soil nails are generally installed to a shallower depth than tiebacks, which might be an advantage if deeply installed tiebacks have to cross property lines and/or terminate under structures owned by other parties; or be otherwise obstructed.

Soil nails work very efficiently in medium dense to dense sand with Standard Penetration Test values, "N" > 7 blows per foot. They also are suited for low plasticity cohesive soil (clays) with SPT values of "N" $\geq$ 8 blows per foot, which also have soil cohesion values exceeding 1,000 psf through the entire depth of soil to be stabilized.

Client:_____ **Date:**_____ **Phone:**_____

Address:_____ **Additional Notes:**_____

_____ _____



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"ECP manufactures the finest Foundation Repair Products and Helical Torque Anchors™ available on the market today. Superior engineering and design make our products the most efficient and cost effective for you, the contractor, and your customers."

- Don May

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