



The Stabilizer™ System

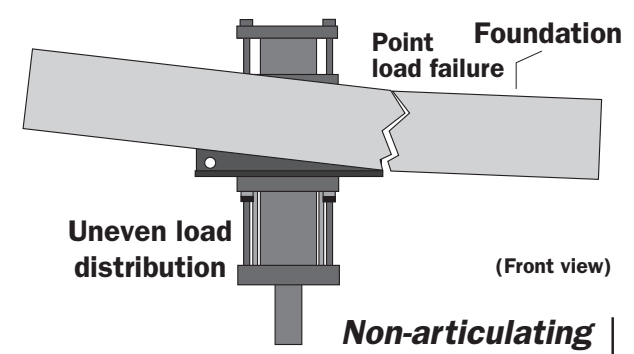
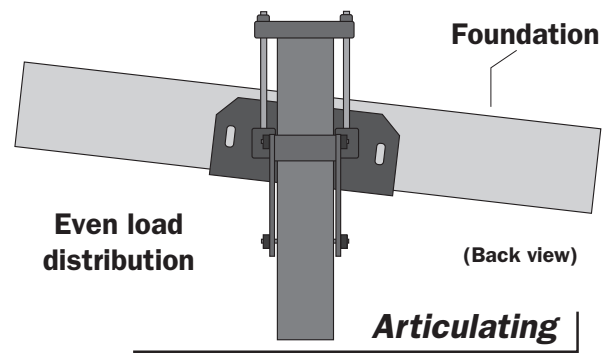


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The Stabilizer™ was born out of experience with many types of foundation repair techniques and provides strength where many other systems have failed. In fact, The Stabilizer™ is the strongest standard system in the foundation repair market, lifting and supporting with the most advanced technology available. It can be used in all types of soils and for all types of foundation problems.

Atlantic Foundation & Repair has been issued 29 patents by the U.S. Patent Office, including one for the most distinctive component of The Stabilizer™: the articulating bracket.

The Articulating Bracket vs the Non Articulating Bracket



The Stabilizer™ helical pier meets the column-buckling requirements of the Foundation Section of the International Building Code.

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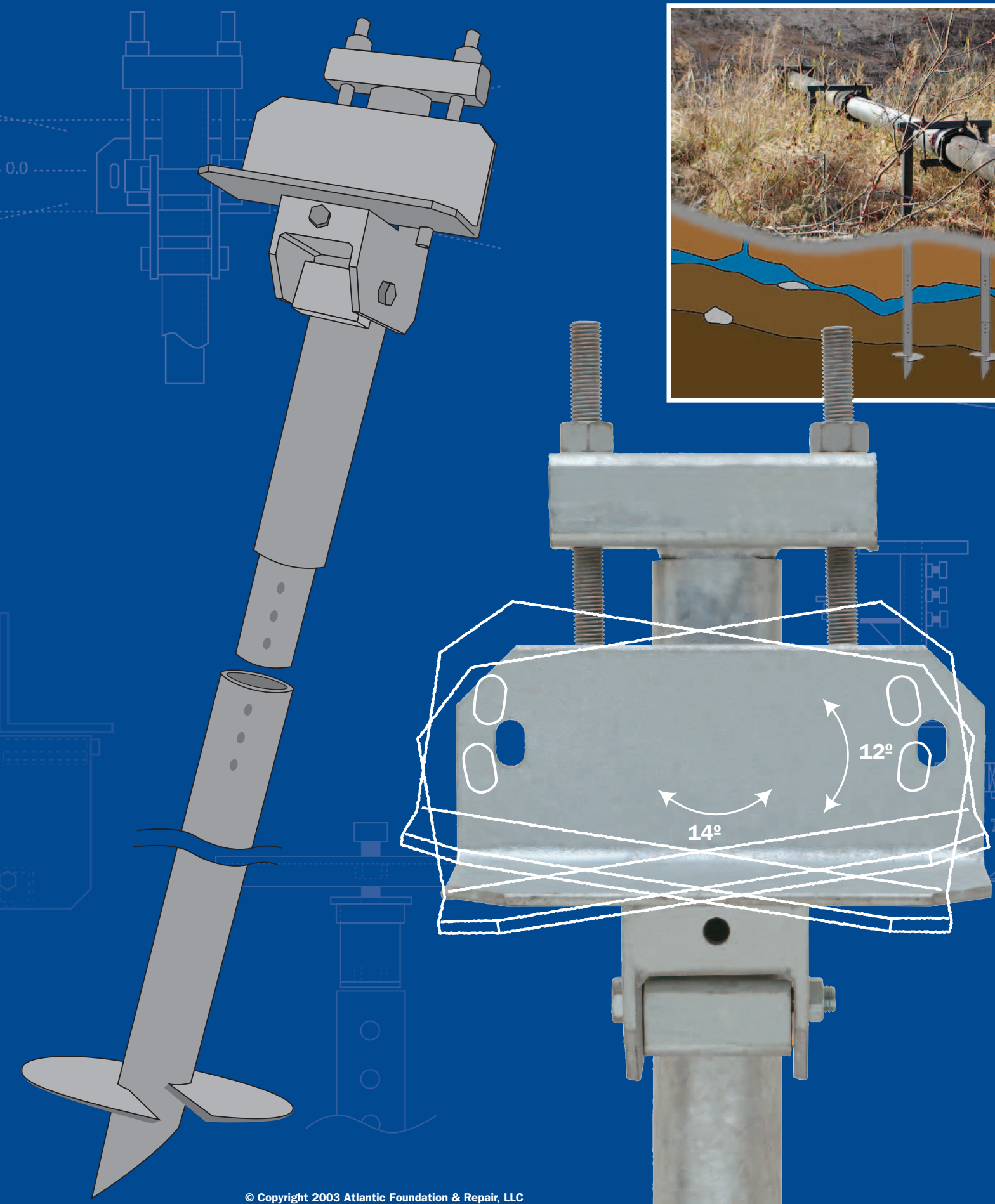
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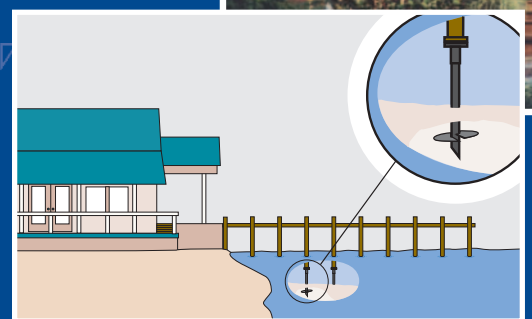
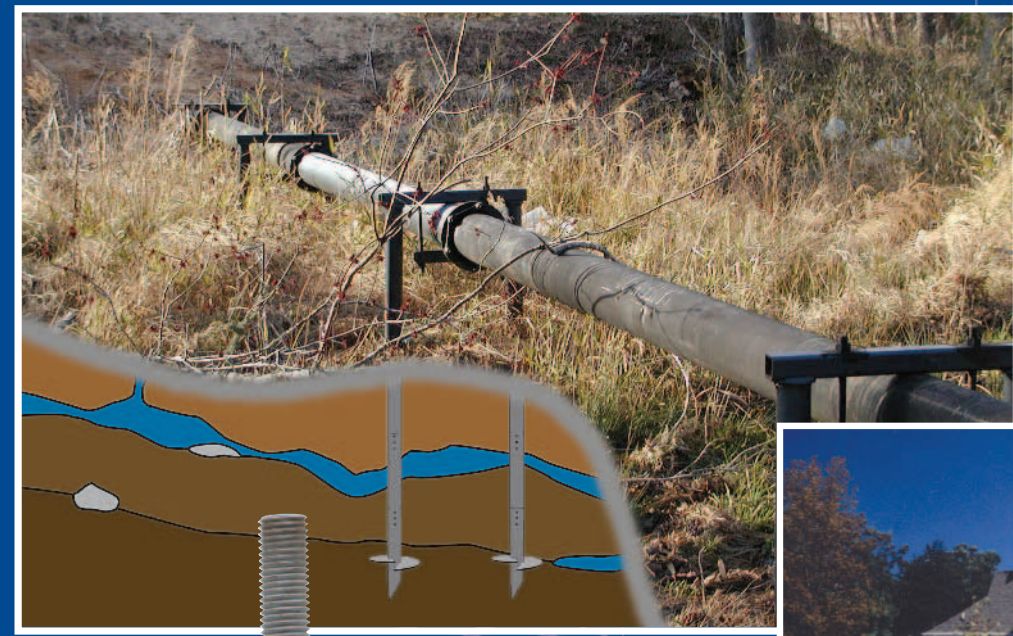
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It's unique. It's patented!



For a long time, very little distinguished one foundation repair system from another. Now all that has changed, thanks to The Stabilizer™, an innovative lift and support system designed and manufactured by Atlantic Foundation & Repair of Raleigh, North Carolina.

The Stabilizer™ is the only foundation repair system available that combines exceptionally strong helical piles with a unique, patented articulating bracket to gently lift and permanently support settled houses, light commercial and other structures. It is also an excellent alternative to conventional "engineered foundations" approaches in creating a firm foundation for new construction.

The Stabilizer™ is engineered to be free of the weaknesses such as *kinking*, *sinking* and *walkout* that occur with other systems. Here's how:

Kinking, or buckling, can be a problem with systems that use thin-shaft anchors or piers. If the weight of the house or structure exceeds the axial and bending capacity of the anchors or piers, the shafts will bend or kink and fail. The Stabilizer™ is manufactured using materials designed to prevent component failure. These include 3 1/2-inch-diameter structurally rated steel piles, the only helical piles that meet the column-buckling requirements of Foundation Section of the International Building Code. All system components are backed with a lifetime guarantee.

Sinking and slippage can occur with push pier systems that rely on soil friction to support a structure's weight. If the piers are installed when the soil is dry, and soil

conditions change, the piers will slip because of the change in friction. With The Stabilizer™, helical piles are screwed, not pushed, into the ground so they stay in place regardless of soil conditions.

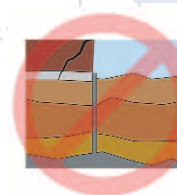
Walkout can develop with push pier systems that lift a house and then use its weight to push the piers into the ground—a process that can be repeated many times. This can cause a section of the house that is being lifted to move away, or walk out, from the rest of the structure. The Stabilizer™ lifts a house only when setting it back in place. In addition, the system's articulating bracket, which is attached to the foundation and the pile, pivots during the lifting and stabilization process. This keeps the bracket aligned with the foundation, preventing damage to the pile, the bracket and the foundation. Without this "give" the result can be induced foundation failure or bending failure points.



Patented articulating bracket



No Kinking

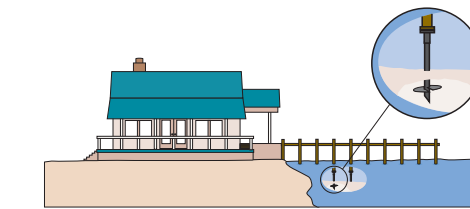


No Sinking

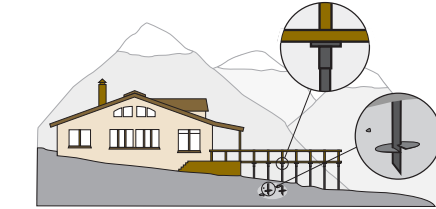


No Walkouts

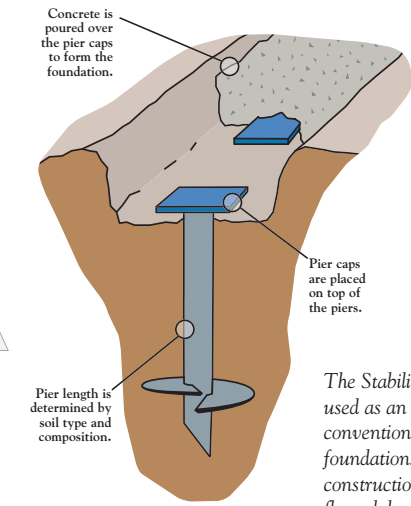
When construction began on an addition to the First Presbyterian Church, the contractor discovered signs of foundation failure. A portion of the structure had leaned forward and rotated. Excavation revealed an additional problem: some of the structure had no foundation at all. There was in danger that the new construction would compound the problem and lead to complete foundation failure. Using The Stabilizer™, Atlantic Foundation and Repair was able to secure and stabilize the church. The new construction went forward as planned.



The Stabilizer™ works well in wetlands and lakes. There is no requirement for excavation or concrete pours because The Stabilizer™ is designed to handle loads to 28,000 pounds with 10 feet of unbraced length.



The Stabilizer™ is an ideal solution for foundation footings in new construction especially in rough or environmentally sensitive terrains. Other systems require backfill or concrete pours.



Concrete is poured over the pier caps to form the foundation.

The Stabilizer™ can also be used as an alternative to conventional "engineered foundations" for new construction foundations, floor slabs and retaining walls.



The Stabilizer™ is the answer to chimneys and rock walls that are pulling away from the structure because of their weight.

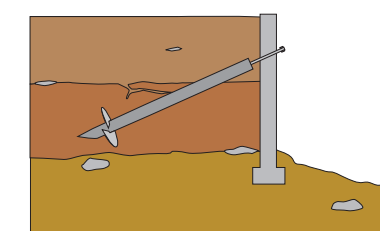


The sure way to correct a foundation failure in a massive brick structure is to install The Stabilizer™. No other system is stronger.

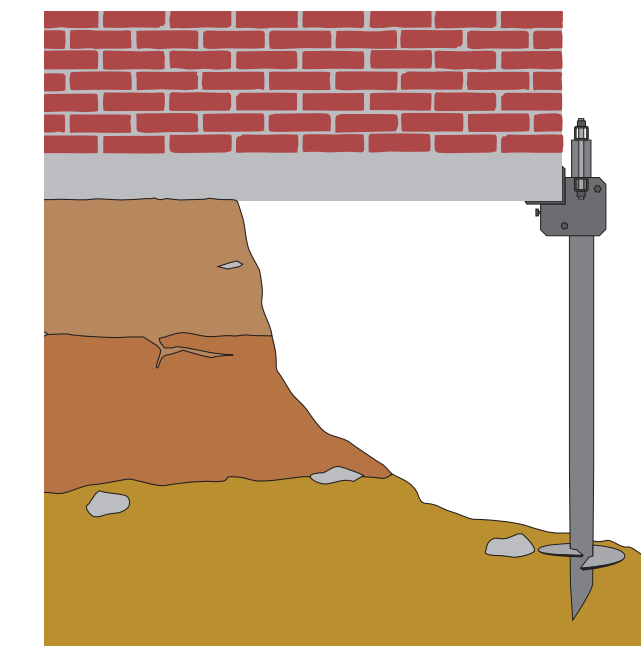
Sinking Boathouse



This boathouse was sinking into the lake. The structure had to be lifted off the foundation and stabilized. Angle iron was placed under the wall and brackets were welded to the angle iron. The brackets were then bolted to the support columns and The Stabilizer™ was used to raise and stabilize the structure.



The Stabilizer™ works equally well in tension applications.



Allowable load is 48,000 pounds at 5 feet of unbraced length and 28,000 pounds at 10 feet of unbraced length.

The Stabilizer™ Pile Specifications

Design Capacities	48,000 lbs
Diameter (inside) nominal	.3 in
Wall thickness	.0216 in
Diameter (outside) nominal	3.432 in
Weight/foot	7.58 lbs
R-radius (outside) nominal	1.716 in
r-radius of gyration	1.16 in
A-area	2.23 in ²
I- moment of inertia	3.02 in ⁴
B-bending factor	1.29
K-effective length factor (theoretical)	0.7
K-effective length factor (recommended design value)	0.8

International Building Code allowable capacity

Fully supported column	48,000 lbs
Soft Soil 5' unbraced column	48,000 lbs
Liquid Soil 10' unbraced column	28,000 lbs

If soil is the problem, it cannot be part of the solution.

Where soil instability has produced foundation failure, foundation repair systems that rely on surface strata soil for support are not dependable. In addition, many systems claim to use bedrock to provide stability. Bedrock, however, varies from one location to another, and it may be cost-prohibitive to reach or inaccessible due to soil friction.

The Stabilizer™ uses helical piles that cut through the soil with minimal disruption and remain fixed in place. Where pile extensions are required, they are joined with strong, rigid couplings that will not give or bend. Also, in contrast to other helical systems, the helix of The Stabilizer™ pile has a rounded edge rather than a sharp one. When the pile encounters a cobble, this rounding causes the obstruction to roll away rather than stopping the pile's progress and falsely signaling stable soil conditions.

