

CHANCE HELICAL PIER® SYSTEM



*A Solid
Foundation Solution*

For Homeowners



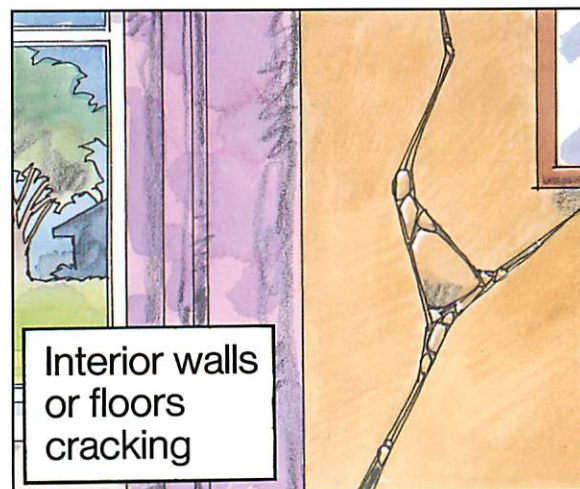
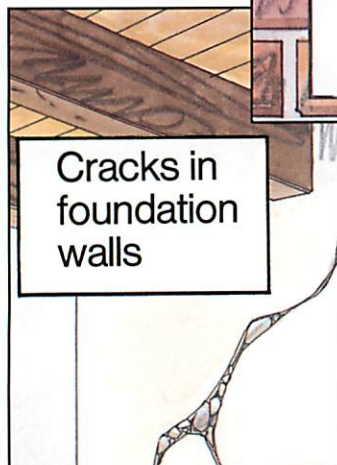
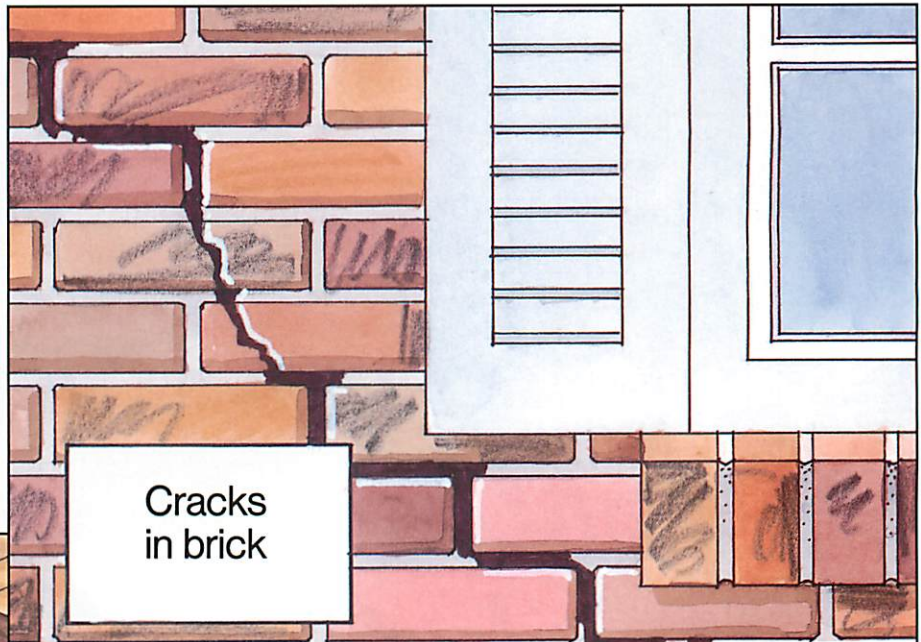
CHANCE®

The damaging effects of foundation settling

Sinking foundations, cracked and buckled walls and uneven floors are problems commonly faced annually by some quarter-million homeowners. Homes and other structures situated on unstable soils settle when their foundations are subjected to extreme moisture conditions or lack proper drainage. A shifting foundation may result in structural damage to your home and a loss of your investment.

Indications of foundation settling problems include:

- Foundation walls that are buckled or bowed
- Doors and windows that stick or don't open properly
- Cracks in foundation walls
- Cracks in exterior walls
- Cracks in interior walls and ceilings
- Sunken or buckled interior concrete floors



Stop the damage with Helical Pier® system

The Chance Helical Pier system offers a technically superior and cost-effective alternative to tearing out and rebuilding your foundation walls. Our patented stabilizing system is backed by more than 80 years of structural engineering experience.

The concept is founded on the principle of screwing a helical plate attached to a steel shaft into stable subsoil strata until the torque applied indicates that the necessary load capacity has been achieved. Adjustable brackets are then attached to the base of your foundation walls, connecting the piers to the foundation. The weight of your home is then shifted to the piers. In the process, foundations, walls and floors are repositioned and retained from further movement.

This innovative system contrasts with other methods which use the structure's weight to force pipes down into the ground. Pipe-pile or skin-friction systems (without helical plates) can involve costly and time-consuming construction methods. Due to the extensive excavation they require, site features such as walkways and landscaping are often disturbed.

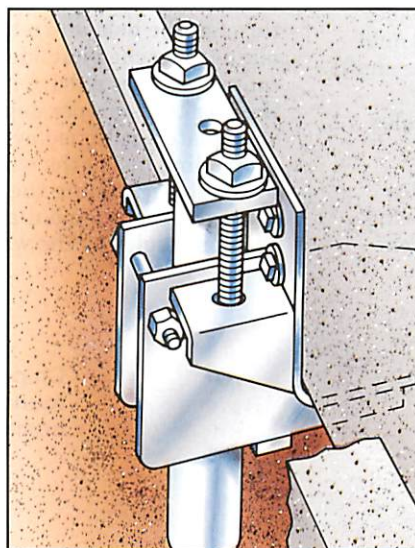
The Helical Pier system installs quickly with common contractor tools. The load-bearing steel shafts are screwed into the ground independent of the structure and their bearing or holding capacity is verified as the system is installed.

Helical Pier advantages

- A time-proven, versatile and technically sound system
- Lower cost — both for the system and its installation
- Faster installation than other methods
- Very limited excavation — site is minimally disturbed
- No heavy equipment required
- Installs in limited-access areas
- Used in new home construction to enhance foundation strength on sites with poor soil conditions
- Installs in limited-access areas
- Limited warranty provided



Placing a twin-helix pier



Adjustable foundation bracket installed on pier

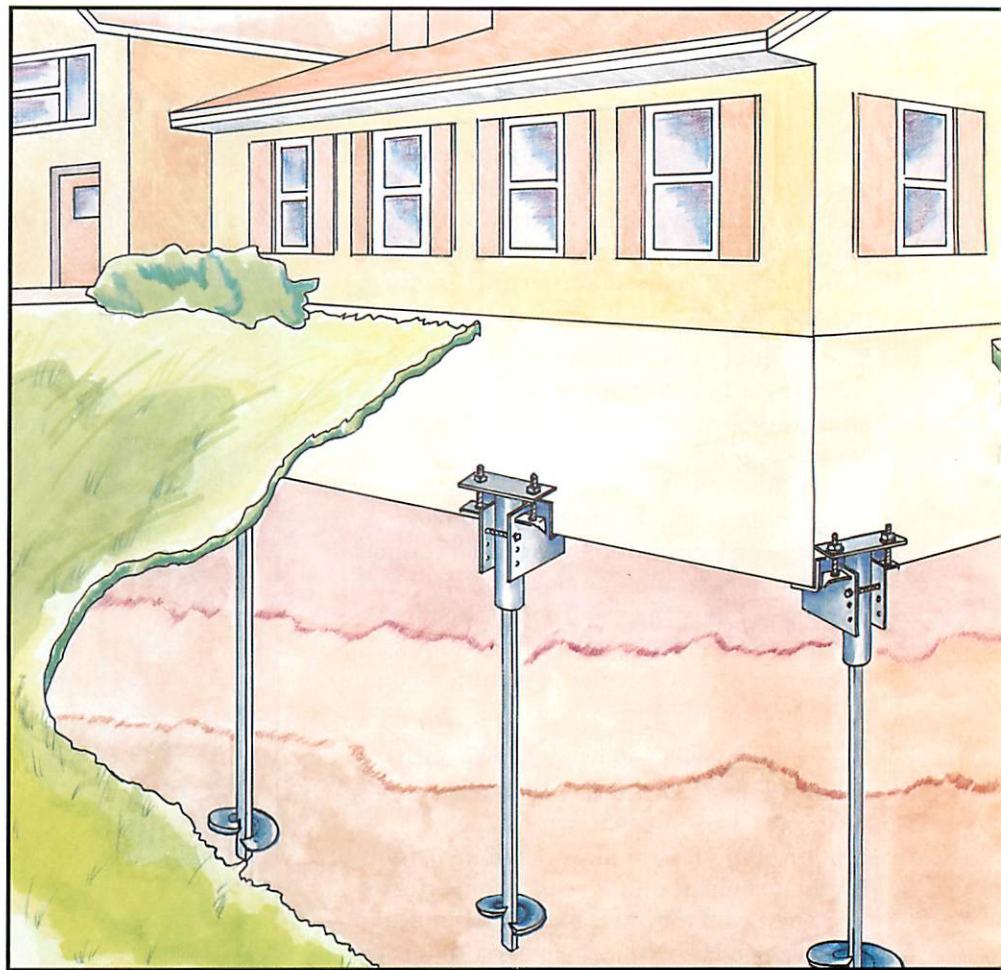
Pier installation procedure

After selecting the Chance Helical Pier® system as the remedy for your foundation problems, a dealer certified by the Chance Company will visit your home to inspect your foundation and determine installation requirements. The dealer will prepare an installation design based on your home's damage and weight and local soil conditions. The design analysis will address the size, position and load requirement for each pier. Then the dealer will give you a price quotation and time estimate for the Helical Pier installation.

Following the design specifications, the contractor will excavate down to the footing at each pier location. A notch will be chipped out of the footing to accommodate a support bracket. A high-torque hydraulic drive head will screw the piers into stable subsoil until the prescribed pier depth is reached. A steel L-shaped bracket placed on top of each pier will connect to the base of the foundation wall. The weight of your home then will be transferred to the piers by a calculated procedure of hydraulic jacking and adjustment of the brackets. Finally, all excavation will be backfilled.

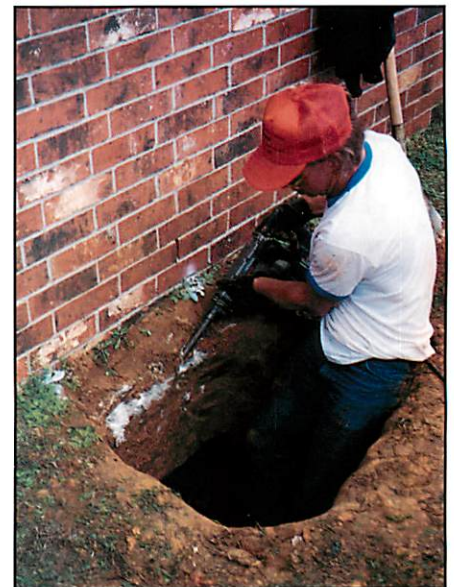
Settling, cracked or bulging concrete floors are also the result of soil movement and are corrected in much the same way. An access hole is cut through the floor at the prescribed location. A Helical Pier is inserted through the opening and screwed into stable subsoil. The top of the pier is then fitted with a steel channel plate that spans the diameter of the hole. Screwing a bolt through the channel plate applies the load to the pier shaft and the floor is raised. After the correction is made, the access holes are filled with concrete.

Buckled foundation walls are also stabilized by Helical Pier anchoring. The contractor first carefully exca-

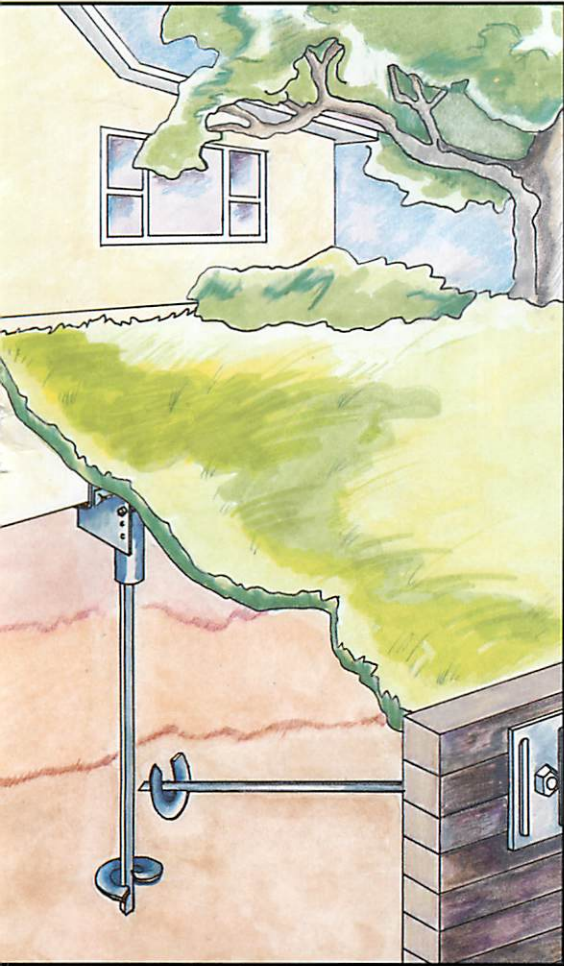


To match individual requirements, Helical Pier components are selected and spaced at proper intervals to support the loads specific to each home. Helical Pier anchors also can tieback retaining and foundation walls.

vates a narrow trench outside, along the foundation wall, to relieve pressure and provide room for repositioning the wall. A small hole is drilled through the wall at the affected area. From inside, a steel shaft is inserted through the hole and a helical screw plate is attached outside. Then the contractor uses a drive motor to install the pier to its proper depth. A ribbed steel plate positioned over the shaft protruding inside the wall is secured by a nut. Tightening the nut counteracts further movement and, in many cases, straightens the wall.



Chipping notch out of foundation footing for bracket attachment



Pier shafts to be cut off next,
then brackets to be attached.



Hydraulic jack pushes down on
Helical Pier shaft and up on foundation
held in bracket. After jacking,
nuts on top of T-pipe secure the
load. Then, jack and plate above are
removed to complete installation.



Helical Pier installation by
hand-held hydraulic driver

Hardware for Helical Pier® foundation system

Power-installed screw anchors have proven to be a reliable and economical advancement in foundation technology. Chance Helical Pier® anchors and related hardware are available in a wide range of sizes to meet many job applications. The Chance Company also offers such unique product resources as:

- Training and field supervision of certified installers
- Geotechnical engineering guidance for any job
- Computer-assisted design capability through interactive software programs and a field manual bringing design theory to practical field application

The system components include solid-steel shafts of round or square configuration to most economically meet any design-load requirement. The standard underpinning bracket typically comes complete with the hardware required for assembly to the Helical Pier shaft. The lifting assembly, consisting of the underpinning bracket and jacking tool, is designed to lift with hydraulic jack assistance.

Hardware is also available for specialized applications, such as the Uplift bracket for seismic conditions, as well as a variety of extensions, adapters, wall anchor kits and slab-repair brackets.



The image displays three different sizes of Helical Pier foundation systems against a green background. Each system consists of a vertical shaft with a helical pier at the base and a bracket at the top. The Light Duty system is the smallest, the Standard Duty is medium-sized, and the Heavy Duty is the largest. Each system is shown with a cross-section of a concrete slab being supported by the pier.

Light Duty Bracket

Primarily for correcting sagging lesser loads, affordable "quick fix" outlasts the porches, stairways, decks and patios it repairs.

Standard Duty Bracket

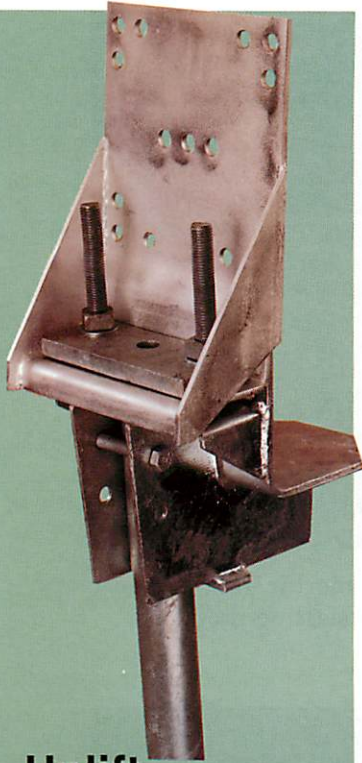
Applied in multiple locations along the foundation to stabilize and correct problems caused by poor soil conditions.

For seismic uplift loads, the Uplift Restraint Bracket may be added.

Heavy Duty Bracket

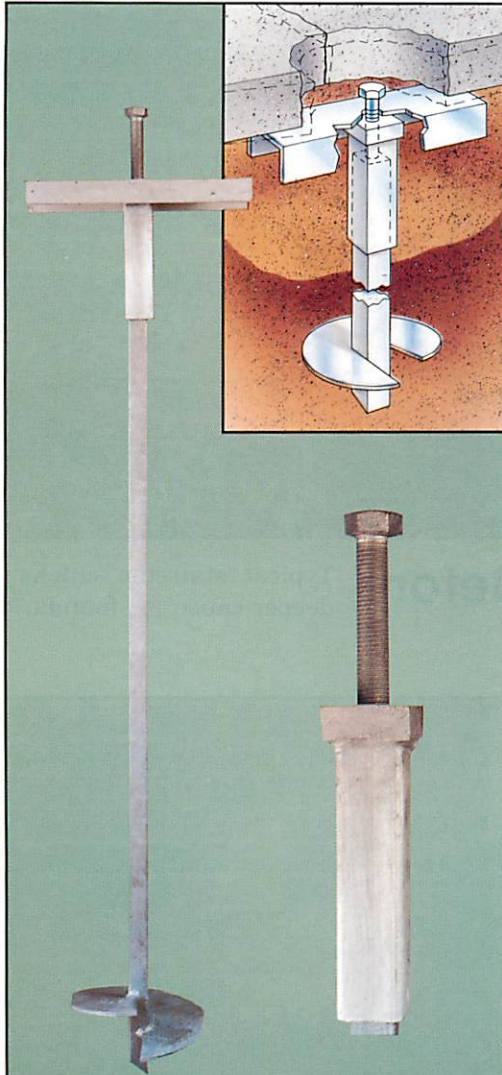
For such higher loads as commercial buildings and larger residences. Applied in multiples to stop settled areas, resist new movement.

All components are hot-dip galvanized to increase product life in aggressive soils.



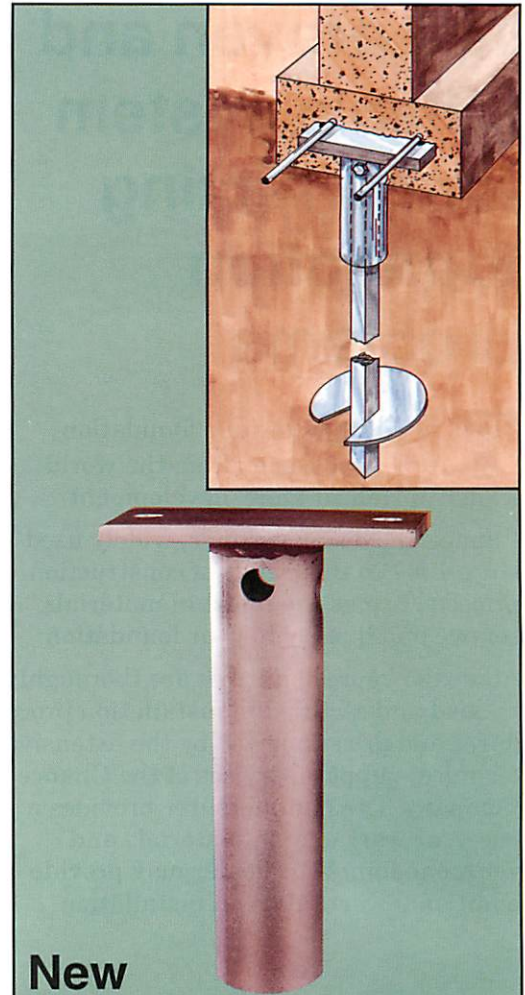
Uplift Restraint Bracket

For seismic conditions and to resist other upward forces. Shown as applied, assembled to top of Standard-Duty Bracket.



Slab Bracket

For stabilizing uneven or damaged floors. Bolt adjusts through cap fitting on top of pier so channel lifts floor.

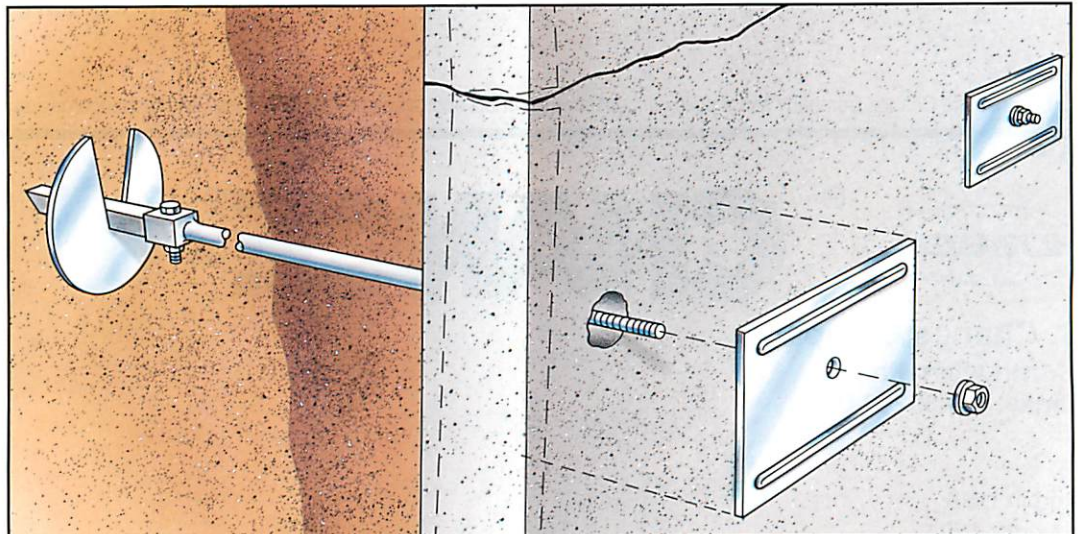


New Construction Bracket

For support of new structures. Placed on piers installed between footing forms and tied to reinforcing bars before pouring concrete.

Wall Anchor

To restrain movement in foundation walls. Through hole drilled in wall, a rod threads into a helical plate which then is installed into soil bank. Ribbed retainer plate fits over rod inside and nut secures, often straightens, the wall.



The proven and reliable system for correcting foundation problems

The solution to your foundation problems comes from the world leader in Helical Pier® development.

Chance anchoring systems, widely used since 1907 in thousands of construction projects, brings the finest in materials, service and quality to your foundation.

All dealer/representatives are thoroughly trained and certified in installation procedures and are supported by the extensive technical-support services of the Chance Company. The manufacturer provides a one-year warranty on materials and workmanship. Your dealer may provide additional warranties on installation.



Before Typical "stairstep" cracks in mortar indicate the deeper cause . . . foundation settling problems.



After Helical Pier stopped the foundation from sinking. Mortar repairs now will have a chance to last, too.

NOTE: Because the Chance Company has a policy of continuous product improvement, it reserves the right to change design and specifications without notice.



CHANCE®

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