



# A Solid Foundation Solution<sup>®</sup> for Homeowners

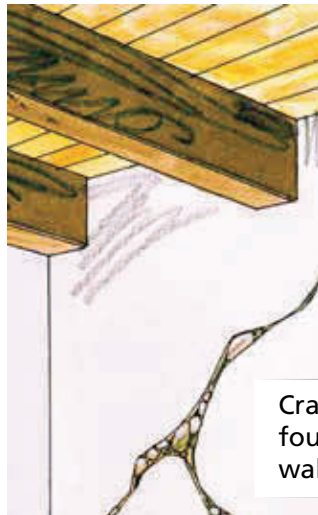
*from*

**CHANCE**<sup>TM</sup>  
*Since 1912*

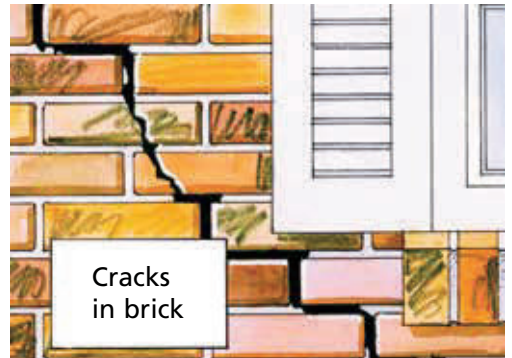
Our products are  
made with  
90% Recycled Material  
Down. Right. Solid.  
GREEN.

# Stop 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 variations or lack proper drainage. A shifting foundation may result in structural damage to your home and a loss of your investment.



Cracks in  
foundation  
walls



Cracks  
in brick



Doors and  
windows  
sticking



Interior walls  
or floors  
cracking

## 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

The CHANCE® Helical Pile Foundation System offers a technically superior and cost-effective alternative to other remedial systems. Our system is backed by more than 80 years of structural engineering experience.

The concept is founded on the principle of turning a helical (screw) pile 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 piles to the foundation. The weight of your home is then transferred to the piles.

In the process, the foundation, walls and floors are repositioned and retained from further movement.



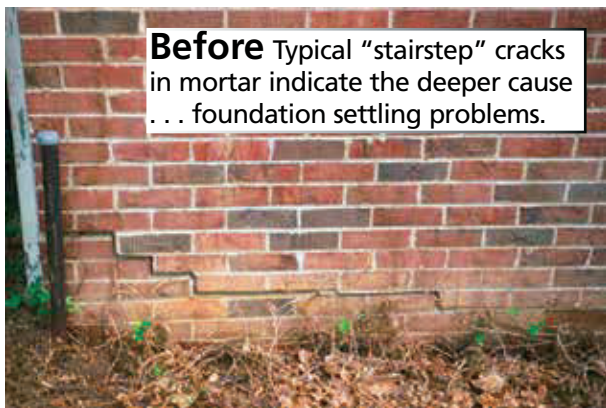
This innovative system contrasts with other more costly and time-consuming methods which require extensive excavation that can disturb site features such as walkways and landscaping.

Our system may be installed only by contractors we certify. The load-bearing steel shafts are screwed into the ground independent of the structure and their bearing or holding capacity is verified via torque correlation as the system is installed.

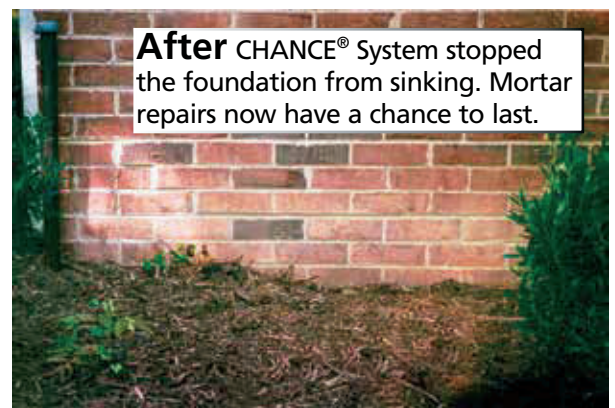


# ... with the CHANCE® Helical Pile Foundation System

The proven and reliable system for correcting foundation problems



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



**After** CHANCE® System stopped the foundation from sinking. Mortar repairs now have a chance to last.

## System 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

# Installation procedure for the CHANCE<sup>®</sup> Helical Pile Foundation System

When you select the CHANCE Helical Pile Foundation System to remedy your foundation problems, a dealer trained and certified by CHANCE Civil Construction will visit to inspect your home and foundation to determine repair options. The dealer will prepare a plan of repair based on your home's damage and weight and local soil conditions. The plan of repair will address the size, location and load requirement for each helical pile. Then the dealer will give you a price quotation and time estimate for the CHANCE Helical Pile Foundation System installation.



To match individual requirements, helical piles and brackets are selected and spaced at proper intervals to support the loads specific to each home.

Following the plan of repair, the contractor will excavate down to the footing at each helical pile location. A notch will be chipped out of the footing to accommodate a support bracket. A high-torque hydraulic drive head will screw the helical piles into stable subsoil until the prescribed depth is reached. A steel L-shaped bracket placed on top of each helical pile shaft will connect to the base of the foundation wall. The weight of your house then will be transferred to the Helical Pile Foundation System by an established procedure of hydraulic jacking and adjustment of the brackets. Finally, all excavation will be backfilled.



Helical pile installation by hydraulic driver



Chipping notch out of foundation footing for bracket attachment



Helical pile shafts are cut off, then brackets are attached.



Hydraulic jack pushes down on helical pile 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.



Completed helical pile and bracket

# Hardware for the CHANCE<sup>®</sup> Helical Pile Foundation System

Power-installed helical piles have proven to be a reliable and economical advancement in foundation technology. The CHANCE Helical Pile Foundation System hardware is available in a wide range of sizes to meet many project applications.

The system components include solid-steel square shafts or round pipe shafts to most economically meet any design-load requirement. The standard underpinning bracket typically comes complete with the hardware required for assembly to the helical pile 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.



## 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.

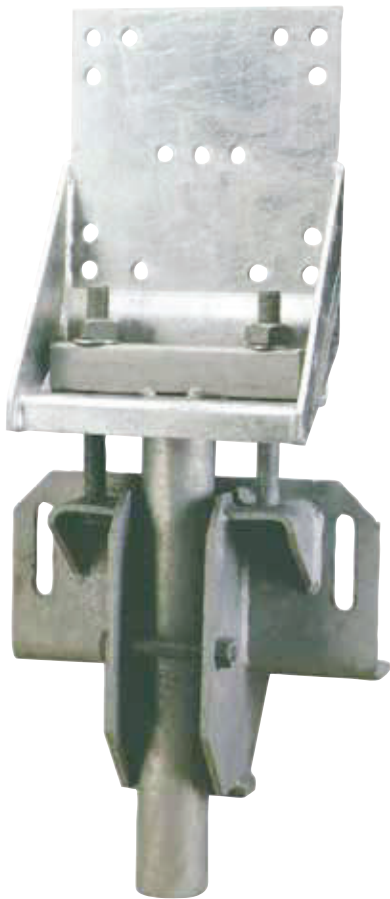
## Light Duty Bracket

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

**All components are Hot-Dip Galvanized to increase product life in aggressive soils.**

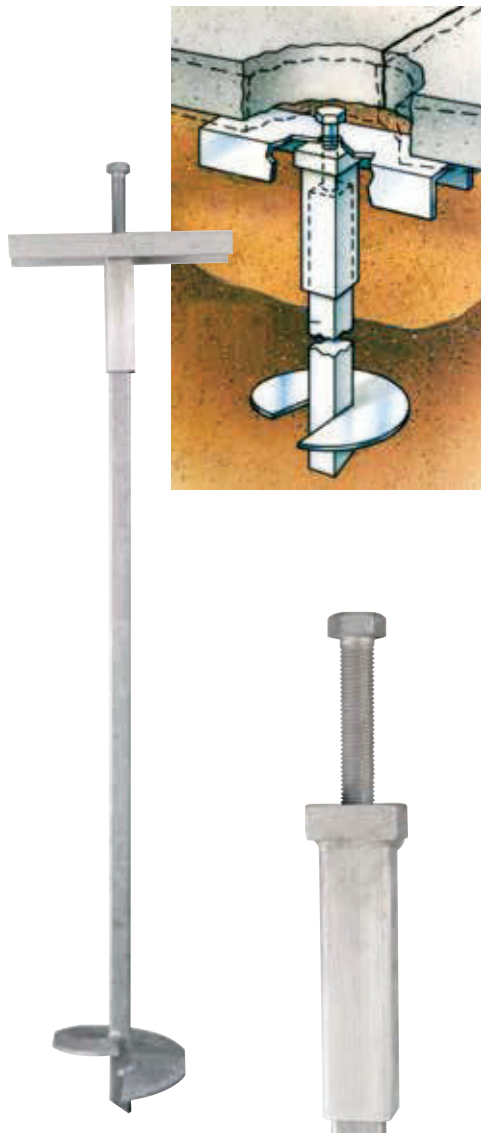
CHANCE also offers such unique product resources as:

- 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



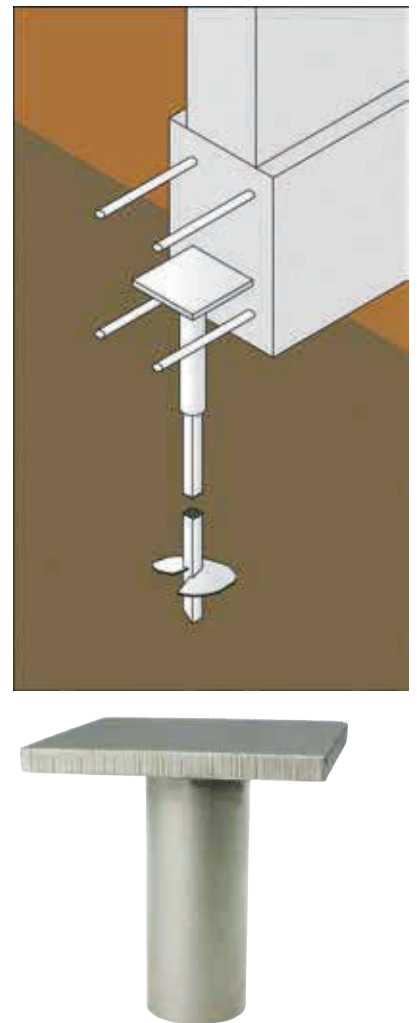
**Uplift Restraint Bracket**

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 anchor so channel lifts floor.

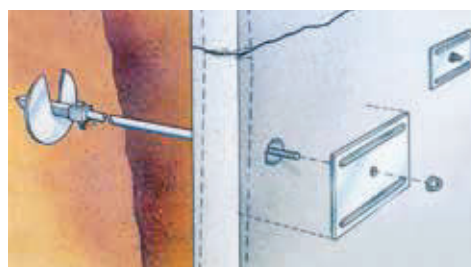


**New Construction Bracket**

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

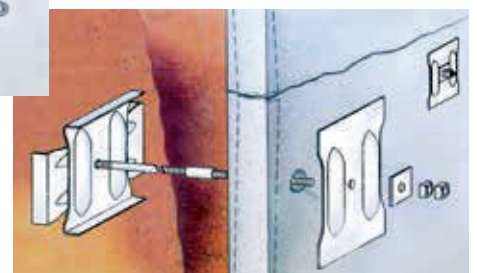
**Wall Anchors**

To restrain movement in foundation walls. Through a hole drilled in wall, a rod threads into an anchor plate installed into the soil bank. A ribbed retainer plate and a nut secure the rod inside the wall. Either of two methods may be used to stabilize, or often to straighten, failing walls.



At left, screw anchors tieback retaining and foundation walls.

**DURA-GRIP® Wall Repair System** cross plate anchors tieback retaining and foundation walls.



# Anchoring the world

With both the CHANCE and ATLAS brands, CHANCE Civil Construction is the international leader in earth anchoring and structural mitigation. CHANCE Helical Piles and ATLAS RESISTANCE Piers are used worldwide to secure residential and commercial buildings, tower foundations, heavy equipment foundations and many other deep foundation applications.

Engineered for dependability and long-term stability, our systems feature exclusive anchoring techniques, tools, designs and sizes that make other foundation methods a thing of the past. Selected by application, our systems are your first line of defense against poor soil conditions, floods and time.

## Demand a better foundation

With the largest distribution and installation network throughout North America, we are ready to provide you with everything you need to get the job done right. We offer engineering guidance, field supervision, accessibility, warehouses, material traceability, AWC-certified welders, technical support and complete documentation.

To demand a better foundation today, locate a local distributor by visiting [www.abchance.com](http://www.abchance.com) and ask for our comprehensive design manual to learn more about our systems specifications.

## Down right solid

Our foundation and anchoring products go down with power into the ground and are accurate, level and right the first time. Our products result in solid stability.

### HI- TECH FOUNDATION SYSTEMS

By Riehle Construction LLC

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[www.abchance.com](http://www.abchance.com)



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