## **Causes of Foundation Failure**



#### 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 settle ment 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



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## "Designed and Engineered to Perform"

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## **Foundation Repair Products**

**Protect Your Lifelong Investment!** Settled foundations can destroy your home's value. Call us today for your estimate. Let us restore your peace of mind.





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## Signs of Foundation Failure

## Inside of House

- Cracks in sheetrock
- Doors and windows that stick
- Cracks in floor or tile
- Misaligned doors and windows
- Trim or molding misaligned

## **Outside of House**

- Gaps around doors and windows
- Cracks in foundation
- Cracks in the bricks
- Fascia board pulling away
- Chimneys are tilting or leaning



# Garage

• Wall rotating out • Cracks in the brick









After



Raised 3 inches



## **ECP STEEL PIERS**<sup>™</sup>

ECP Steel Pier<sup>™</sup> Systems can be installed in either interior or exterior locations. Each ECP Steel Pier<sup>™</sup> System provides a two-stage system of driving the manufactured piers to load bearing strata then, using hydraulics, restoring the structure to the desired elevation. ECP Steel Piers™ stops settlement, lifts the structure, can close cracks and can be used to correct other structural flaws caused by the settlement and/or ground movement. Designing a job should involve professional engineering input. Specific information involving the structures, soil characteristics and foundation conditions must be considered for the final design.

If in doubt consult a Professional Engineer.

- Separation from door

## **Basement of House**

- Walls leaning in or out • Cracks in the poured or
- block walls
- Water leakage through cracks at base of walls



## **Steel Piers™**

**Residential • Commercial • Industrial** 



#### **Front View Drive Stand Model 350 Series** Rated Capacity: 50,000 lbs. 10,000 PSI **Drive Cylinder KEY Product Features:** > U.S. Patent Protected > ASTM Certified Material > 3 Control Plates > 80 Square Inch Bearing Surface > High Capacity > No Concrete Required **Rod Aligner** > Portable Equipment > NO SHIMS, NO PINS Drivestand > High Strength Galvanized 3.5"O.D. Pier Material > 42" Pier Sections with Welded Coupler Guide Tool > Friction Reduction Collar Holding Plates > Installed to Rock or Load Bearing Strata > Engineered Safety Factor of 2:1 **Steel Pier** > Piers Are Driven Vertically **Drop Pins** Sleeve **Actual Installation** Holdina Plates Bracket Friction 5/8" anchors Reduction Collar

## **STRONGEST PIER IN THE INDUSTRY!**









2. Set bracket with anchors

3. Attach drive stand

**Manufacturer's 25 Year Warranty** www.earthcontactproducts.com