

## A CASE HISTORY

**Project:**

Two-story chimney falling  
from side of house  
Prince George's County  
Laurel, MD

**Contractor:**

Levelift Systems Inc.  
Rockville, MD

**Job Description:**

The two-story chimney had moved away from the side of the house 2¼ in. at the top. At about 4 ft. from ground level the chimney had moved away from the house 5⁄8 in. Two 10 in. HELICAL PIER<sup>®</sup> Foundation Systems anchors were installed to 19 ft. depths at the corners of the chimney. The anchors were installed to 2,500 ft.-lb. of torque and the Chance lifting brackets were attached to the foundation of the fireplace.

Using an Enerpac manifold jacking system, the lift was accomplished. The gap at the top of the chimney was closed from 2¼ in. to ½ in. and at the 4 ft. mark on the chimney, the gap was closed from 5⁄8 in. to 3⁄16 in.

**Anchor Loads**

During the time of jacking, a pressure gauge was being monitored to determine the amount of load that was being applied to the Chance brackets and anchors. When the lift was completed, the total load on the two anchors was 21,000 lb. Note that each anchor was installed to take a load of 25,000 lb.

**Installing Equipment**

A Chance hand-held 2,500 ft.-lb. hydraulic drive unit with power pack was used to install the anchors.

**Summary**

The project went extremely smoothly. The time required to complete this job was eight hours.





# UNDERPINNING ANCHORING REPORT

## A CASE HISTORY

<b>Project:</b> Chimney Creek Condominiums Genesee, CO	<b>Structural Engineer:</b> Richard Weinhart Consultants Lakewood, CO	<b>Tieback Contractor:</b> D & B Drilling Wheat Ridge, CO
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**Job Description:**  
 One of the end units in this condominium complex built into the mountainside overlooking Denver was experiencing lateral movement. Fourteen 9"-diameter holes were cored through the interior walls facing the mountainside so that Chance SS5 anchors with single 8-in. helices could be turned into the soil.

Two rows of tiebacks were required.  
 On the lower wall, the anchors were installed to depths from 11 ft. to 23 ft.  
 The top row anchors were installed to depths from 25 ft. to 49 ft.

All anchors were load-tested from 5 Kips to 23 Kips. The cored holes in the wall were filled with non-shrink grout and end adapter plates were installed on the threaded stud adapters terminating the SS anchor extension shafts.