

# CASESTUDY

DEC 2022



HELICAL PILES STABILIZE  
SINKING SAN CLEMENTE HOME

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# 1920S SAN CLEMENTE HOME SETTLES 3.4 INCHES WITH EXPANSIVE CLAY SOIL PRESENT UNDER FOUNDATION

## PROJECT BACKGROUND

A San Clemente homeowner called the Dalinghaus Construction team after his family was tired of the cracks appearing all across their walls and ceiling. Built in 1928, this 908 sqft home had experienced quite a history, but most notably being the 3.4 inches of settlement along the back corner of the home. This settlement was likely to the the presence of some very expansive clay soils beneath the home's foundation!

## PROJECT DESIGN PHASE

Our Project Design Specialist, Phil Laney, performed the initial foundation evaluation on this property and measuring 1.9 to 3.4 inches of settlement in the worse areas. Towards the end of the inspection Phil began designing a repair plan that would consist of 14 helical piles to stabilize the structure from any future settlement. Lifting the home and recovering the settlement would not have been a great option for the homeowner as over the years they had used a vast array of self leveling products to help the floors, and they didn't want it removed.

## DALINGHAUS SOLUTION

The repair plan would consist of the installation of those 14 vertical helical piles around the back half of the home with the goal of stabilization. After removing concrete from 8 of the helical pile locations the crew got to work in hand excavating pier locations and prepping the home's footing to accept the ECP Helical Pile Brackets. Finding competent, load-bearing soils at an average depth of 21', the crew was able to quickly drive these helicals down to proper depths before installing the brackets and hydraulically transfer the load on the soils beneath the footing to these newly installed helical piles.

### INSTALLATION OVERVIEW

TOTAL HELICAL PIERS

14

HELICAL PRODUCT

TAF-288

PRODUCT MANUFACTURER

EARTH CONTACT PRODUCTS  
(ECP)

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