

HELICAL PILES REPAIR

HISTORIC CASE STUDY #21 HOME

60
HELICAL
PILES
INSTALLED

RESIDENTIAL

RAM JACK SoCAL
www.ramjack.com | 818-859-1935
Chatsworth, CA

RAM JACK REPAIRS HISTORIC HOME IN LOS ANGELES

LOS ANGELES, CA

Repairing historic structures adds new layers of complexity to any project; providing foundation support to these spaces is no different. When a project in the 1950s originated with Arts and Architect Magazine and master architect Peter Koenig, one can be sure that all eyes would be on the repair and restoration of this Case Study House #21. The homes built in the series of Case Study Homes were to show the ability to build affordable homes in the post-war era where housing was limited.

PROBLEM

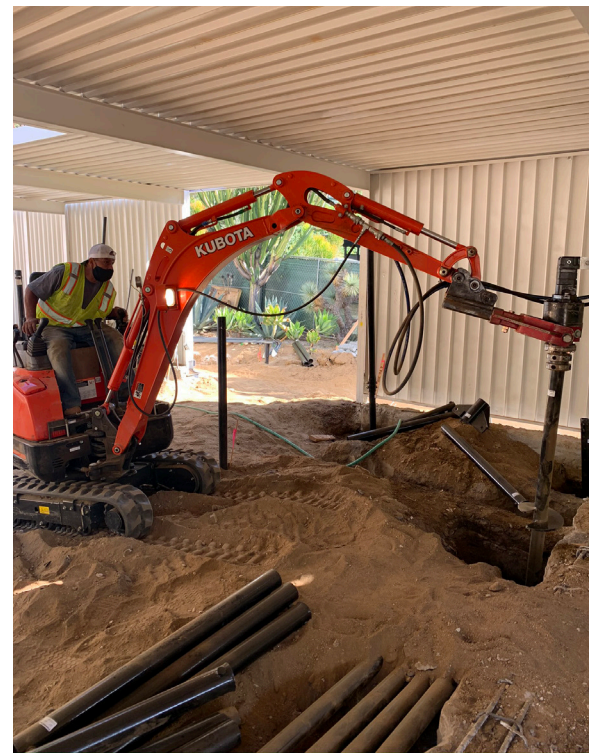
When the restoration team removed the concrete slab, they were surprised to see the soil under the foundation slid away and left an 18 in. gap between the foundation and the slab. They also measured a 2 in. horizontal movement in some areas of the structure. Under the guidance of the Los Angeles Cultural Heritage Commission, Designer Mark Haddaway and Engineer John Labib with John Labib & Associates designed the plan which included new grade beams, supporting existing footings, and providing new support to the reflective pools on the property. With a great understanding of helical piles, the team specified Ram Jack Helical Piles which were then approved by the Cultural Heritage Commission. They were especially pleased that the original foundation could be saved and repaired rather than replaced—further preserving the historic home.

PROPOSED SOLUTION

The design and engineer team designed a grid of Ram Jack Helical Piles on both the interior and exterior. The design was to ensure no additional horizontal movement to the structure over time. Special care would need to be taken when installing the (60) 2 7/8 in. helical piles with 8"-12" double helix configuration as the excavator would have just enough clearance to install the piles without damaging the existing corrugated steel roof or steel beam supports.

OUTCOME

Ram Jack SoCal installed the piles to specification. On the interior new construction brackets were installed to support the new additional grade beams. On the exterior, new construction brackets were installed to support the newly poured reflective pools. The entire perimeter received side load repair brackets. The project went smoothly and took five weeks to complete.



TESTIMONIAL

After watching the first Ram Jack Helical Pile being installed, a Los Angeles Cultural Heritage Commission representative noted, "Ram Jack Helical Piles are the greatest invention next to the wheel. Why aren't they under everything?" We couldn't agree more.



**DON'T DO IT TWICE.
DO IT RIGHT.**

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INSTALLATION OVERVIEW

RESIDENTIAL INSTALLATION

RAM JACK SOCAL

PRODUCTS USED

2 7/8" HELICAL PILES WITH
8"-10" DOUBLE HELIX CONFIGURATION

PRODUCT TYPE

INTERIOR PILES

TYPICAL APPLICATIONS

Ram Jack's 2 7/8" external connection helical piles can be used in tension or compression.



Custom Engineered Solutions Rooted in Quality.



CCMC RECOGNIZED

ISO
9001:2015
CERTIFIED



ICC-ES RECOGNIZED

At Ram Jack®, we are focused on providing custom-engineered solutions that meet the unique needs of our commercial clients. You can move forward with confidence knowing we maintain code compliance, providing piles and brackets that reach the highest rating among competitors' products recognized by ESR-1854. Our company has the most products recognized by the ICC and boast an ISO 9001:2015 certified manufacturing facility.

We have the facility to design and fabricate custom products—we are the one-stop solution for engineers and even offer our own in-house engineers for assistance with your project. If you need assistance with foundation designs, we also provide engineer tools and resources and our engineers can work with the project's EOR to develop a custom-designed solution.



Everything an Engineer Needs

The Ram Jack Technical Manual provides engineers with the information that you will need to understand, design, and specify Ram Jack's helical and driven piles. It also provides information verifying compliance with current building codes and ICC-approved acceptance criteria.

Everything an engineer could ever want and need to know about Ram Jack Helicals and Driven Piles in one book. If you or your firm would be interested in a Ram Jack Technical Manual, please contact your local Ram Jack dealer by emailing info@ramjack.com.



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