



**RAM JACK**

# CASE STUDY

**RAM JACK HELICALS PROVIDE HOUSING UNIT**

# STABILIZATION

**FROM DOWNWARD MOVEMENT**

## **INSTALLATION OVERVIEW**

Get more info on the ins-and-outs of Ram Jack products used.

## **ENGINEER RESOURCES**

Find the back page of this case study for more information on engineer resources.

**728**

HELICAL  
PILES  
INSTALLED!

**RAM JACK TRI STATES**

[www.ramjacktri.com](http://www.ramjacktri.com) | 800-852-1588  
Newtown Square, Pennsylvania

RENDERING BY  
KSK ARCHITECTS,  
PLANNERS, AND HISTORIANS



## Ram Jack Provides Stabilization From Downward Movement to North Central

Philadelphia, Pennsylvania

The North Central Choice Neighborhoods, part of the U.S. Department of Housing and Urban Development (HUD), received a grant for a new development in Philadelphia, PA, to provide mixed-income rental and homeownership housing units. In the development location stood a group of building lots that contained large amounts of fill materials and debris.

### PROBLEM

The debris from old homes that had been torn down several years before plagued the lots. Although some debris could be removed, fill materials could compromise future structural foundations.

### PROPOSED SOLUTION

The team at Ram Jack was contacted to propose a solution. After analyzing the building lot, the team quickly identified the need for new construction helical piles to be installed. They would need 728 piles in total. Ram Jack commissioned the assistance of Larsen Landis – structural engineering experts in Philadelphia. Together, Ram Jack and Larsen Landis provided two load tests in order to verify the

capacity. The team would possibly need to perform some pre-drilling in certain areas before the helical pile installation could begin.

### OUTCOME

Ram Jack Tri-States needed to install new construction helical piles to carry grade beams and column loads for new houses to be constructed upon. The team went ahead with pre-drilling for certain sections when they encountered old rubble stone foundations that stood in the way. A total of 728 piles were used, with an average pile depth of 24 ft. The team required loads of 40 kip (allowable) and 80 kip (ultimate). The Ram Jack team maintained impressive productivity and dedication throughout the entire process from start to finish. The team moved so swiftly that the workers on site found it challenging to keep up with them. The concrete crew always battled to keep up the pace. The job was successfully completed and was the result of 100% union labor.





**DON'T DO IT TWICE. DO IT RIGHT.**™

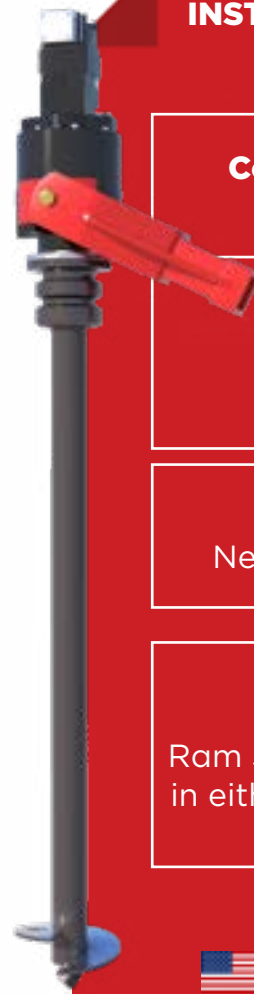
## INSTALLATION OVERVIEW

**Commercial Installation**  
Ram Jack Tri-States

**Products Used**  
3 1/2" Helical Piles

**Product Type**  
New Construction - Helical

**Typical Applications**  
Ram Jack's helicals can be used in either tension or compression



**Proudly Made in America**



**RAM JACK TRI-STATES**

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

800-852-1588

Newtown Square, Pennsylvania

# 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](mailto:info@ramjack.com).

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

TM

