



**RAM JACK**

# CASE STUDY

**RAM JACK HELICALS ANCHOR TEST BED REQUIRING**

# 1,000,000 LBS CAPACITY

## 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.

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[www.ramjacksf.com](http://www.ramjacksf.com) | 386-454-1920  
High Springs, FL

# 32

HELICAL  
PILES  
INSTALLED!



## Ram Jack Lowers Industrial Testing Facility Building Costs with Helicals

Havana, Florida

FMS Engineering, LLC was hired by Applied Fiber, a testing company specializing in terminated synthetic fiber systems.

### PROBLEM

Applied Fiber needed to construct a test bed that would test high capacity rope terminations, requiring a 1,000,000-pound test. An anchor point had to be tied to the machinery used to conduct each test. Constructing a concrete anchor large enough to accommodate such loads would have cost \$500,000.

### PROPOSED SOLUTION

The engineer of record (EOR) suggested using a smaller concrete slab anchored by helical piles. The hope was that this would reduce the amount of concrete required. Initially, the EOR wanted 20 piles per slab with a working load of 90 kips per pile. Accommodating 90 kips per pile would require installing 5.5 in. dia. piles.



## OUTCOME

Ram Jack Solid Foundations worked with in-house engineers to design a more economical use of piles of a different diameter to bring the cost down. Ram Jack value-engineered the project to reduce loads to 45 kips per pile using (32) 3.5 in. dia. piles per slab. The change in design to a smaller diameter helical pile reduced project time due to fabrication and shipping of materials. The 3.5 in. dia. piles also cost about half what the 5.5 in. would have. This kept the project on time and under budget.



**DON'T DO IT TWICE. DO IT RIGHT.**™

## INSTALLATION OVERVIEW

### Commercial Installation

Ram Jack Solid Foundations

### Products Used

3 1/2" Helical Piles

### Product Type

New Construction - Helical

### Typical Applications

Ram Jack's helical lead sections can be used in either tension or compression



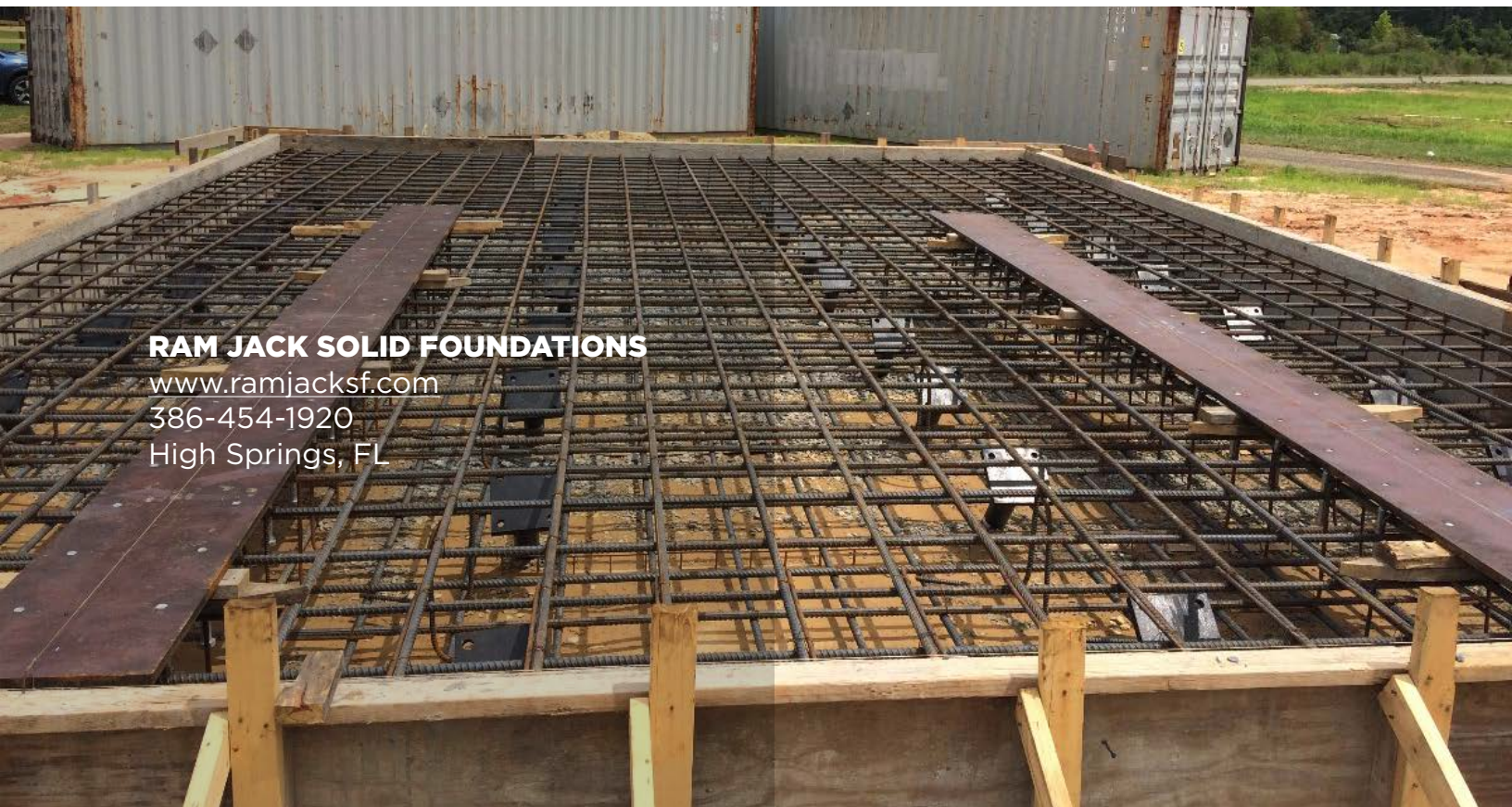
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# Custom Engineered Solutions Rooted in Quality.



CCMC RECOGNIZED



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).



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