



RAM JACK®

CASE STUDIES

FAIRFIELD COUNTY MUNICIPAL COURTHOUSE

SUPPORTED

BY RAM JACK HELICAL PILES

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.

283
HELICAL
PILES
INSTALLED

FAIRFIELD COUNTY MUNICIPAL COURT

COMMERCIAL

B-LEVEL, LTD

www.b-level.com | 614-837-1269

Baltimore, OH

FAIRFIELD COUNTY MUNICIPAL COURTHOUSE

LANCASTER COURTHOUSE | LANCASTER, OH



INTRODUCTION

In the city of Lancaster, Ohio, the Fairfield County Municipal Courthouse has been standing since the 1800s. With planned renovations as well as new additions to the structure, the experts at B-Level, LTD. were called in to assist on the underpinning of the foundation.

PROBLEM

The three-story structure had a foundation sitting on sandstone with a basement only offering a height of 8 ft. to work within. Further complicating the

construction, there was no exterior access to the basement. Due to the age of the structure, the poor foundation supporting the structure, and the addition being added, it was determined that a new foundation would be necessary to accommodate the future plans.



PROPOSED SOLUTION

Darin Willis, P.E., President of Fortified Engineering Solutions, teamed up with Christopher Sekol, P.E., S.E., of Select Structural Solutions to design a plan which would utilize Ram Jack helical piles to support the new concrete foundation with steel girders extending to the third floor. B-Level, LTD., a franchise within the Ram Jack network, would be the team to install the Ram Jack helical piles based on the plans designed by the partnering engineering teams. Two elevator pits would need to be excavated in the basement, requiring Ram Jack helical piles to be installed in order to support the foundation of the structure.

OUTCOME

During preparation for installation, concerns arose on how equipment would fit in the basement to properly torque the piles into place. The solution was to use a Toro Dingo which has the capability of moving downstairs into the basement. While this solved one issue, it brought about another. With increased carbon dioxide levels presented by the equipment, air exchangers were required to complete the project. In the end, a customized attachment had to be built to hold the driver and to install the piles at the proper angle as specified by engineering. This was a long project as work was required to be installed in segments to allow other contractors involved in the project to complete their phases of work. The successful installation was completed once the last piles were installed to support the new addition to the structure.



INSTALLATION OVERVIEW

Commercial Installation
B-LEVEL

Products Used
8-10-12 on 7 ft. 4 1/2 in. pipe with
New Construction Bracket

Product Type
New Construction - Helical

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



Proudly Made in America



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.

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

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