"Having ICC-ES evaluation reports will make it easier to specify and design helical foundation systems. Engineers, designers and code officials can expect a higher quality and reliability from helical foundation systems by insisting on ICC-ES Evaluation Reports."

DARIN WILLIS
DIRECTOR OF ENGINEERING, RAM JACK® FOUNDATION SYSTEMS

Ram Jack® Foundation Systems Provide Stability Quickly and Cost Effectively

For centuries, concrete or pile-driven foundations have been used to ensure that a structure's base was solid and stable. While this method offers lasting durability, it requires a lot of heavy equipment and a large crew (and associated high costs), not to mention the considerable delay in waiting for the concrete to cure.

Helical foundation systems like Ram Jack® ensure the same level of structural stability is achieved, yet with much greater speed and cost efficiency, thereby saving both time and money.

The Ram Jack® Foundation System includes a helical pile system and a hydraulically driven steel piling system, both of which are basically "instant piles." The helical pile system transfers gravity loads from a new or existing structure to soil that can withstand the weight, and the hydraulically driven steel piling system transfers loads from existing foundations to load-bearing layers of soil that can support the compression loads. Brackets are used to transfer the loads from the building foundation to the helical pile system or the hydraulically driven steel piling system. The piles can also be installed with handheld equipment or small machines, making the system ideal for indoor projects or for work around existing structures where work areas are restricted.

Ram Jack's components include complete systems of individual parts and devices, so they are adaptable and can be based on the size or layout of the structure.

Ram Jack's extensive expertise was invaluable in the development of the ICC-ES Acceptance Criteria for Helical Foundation Systems and Devices, (AC358).This document has become an industry standard against which all helical foundation systems are measured.

The ICC Evaluation Service (ICC-ES) Evaluation Report (ESR-1854) issued in February 2011, on Ram Jack® Foundation Systems, reviews not only the helical pile systems and hydraulically driven pile systems as a whole, but also all individual components that make up these systems. The report provides detailed specifications on the systems and their components, as well as capacity of the parts and design and installation details.

Because of their efficiency and relatively low cost, there is great demand for helical foundation systems like Ram Jack. "The adoption of acceptance criteria AC358 and having the ESR-1854 completed on Ram Jack Foundation Systems are major milestones, not only for Ram Jack, but for the helical industry as a whole," said Darin Willis, Director of Engineering with Ram Jack. "Having ICC-ES evaluation reports will make it easier to specify and design helical foundation systems. Engineers, designers and code officials can expect a higher quality and reliability from helical foundation systems by insisting on ICC-ES Evaluation Reports."

While structural calculations and drawings must be provided to the code official by a registered design professional (as is the case with any structural plan submission), since the Ram Jack system has been evaluated by ICC-ES, the review process is generally faster, since the code official also uses the evaluation report to help make his/her final decision on approval.

"As with all ICC-ES reports, the Ram Jack report will save building departments countless hours when evaluating building plans that specify Ram Jack Foundation Systems," added Yamil Moya, Staff Engineer with ICC-ES. "When ICC-ES issues a report on an evaluated product, code officials know it is code compliant and will result in structurally sound buildings. ESR-1854 provides building professionals with comprehensive details by which to determine the benefit of using Ram Jack's foundation systems for a project, as well as for building officials when approving plans."

To learn more about this product, view **ESR-1854**, Ram Jack® Foundation Systems, issued on February 1, 2011, and acceptance criteria **AC358**, Acceptance Criteria for Helical Foundation Systems and Devices, effective July 1, 2007.

All ICC-ES Evaluation Reports can be accessed and downloaded free of charge at **www.icc-es.org/evaluationreports**, and are readily searchable based on attributes such as product type, manufacturer or report number.

** This article is intended to provide information on a product for which an ICC-ES Evaluation Report has recently been issued. It should not be construed as a product endorsement or a recommendation for its use.*