

# North Carolina Board of Examiners for Engineers and Surveyors

## Foundation Repair Company Guidelines

The North Carolina Board of Examiners for Engineers and Surveyors is providing this document to serve as an interpretative guide for the proper operation of foundation repair companies with respect to engineering services to comply with The Engineering and Surveying Licensing Act, G.S. 89C. The variation in company organization and services requires that these general guidelines be applied to the specific facts for each company, taking into account the definition of engineering in G.S. 89C-3(6), the requirement for licensing of business firms in G.S. 89C-24 and the associated General Statutes for business formation in G.S. 55B (Professional Corporations), and G.S. 57C (Limited Liability Companies).

*The purpose of this guide is to assist a foundation repair company in complying with the statutes and to assure that the public is properly protected when receiving recommendations for foundation repair and the associated engineering analysis and recommendations. This starts with the preliminary assessments of foundation repair services and requires that a Professional Engineer (PE), or an employee of the PE who is under the direct supervisory control (responsible charge) of the PE, make the preliminary analysis, recommendations, judgment and calculations as to methods of repair, including evaluation of the number and location of support piers, and continues through the design of the repair.*

*A statement that there is a failure of the foundation, or structural repairs are required, should only be made by a PE who has evaluated the conditions. If such conditions are suspected by other than a PE, a referral should be made to a PE.*

- a) **Company Engineering License Required.** Every company that evaluates a foundation and makes a recommendation as to whether repair is needed must have a properly licensed Professional Engineer and the company must be licensed with Board of Examiners for Engineers and Surveyors (the Board) or have a properly licensed engineering firm do the evaluation and recommendations. The foundation companies simply not holding themselves out as engineers does not avoid the issue. One difficulty is that the Professional Corporation Act in G.S. 55B limits the ability of most foundation repair companies (if a corporation or limited liability company) to become licensed with the Board), due to ownership requirements (G.S. 55B-6) and the limitation on services offered (G.S. 55B-14) . Many companies set up a separate associated licensed engineering firm or have an existing engineering firm do the engineering.
- b) **Licensed as General Contractor.** Recommending certain foundation repair work based on a company's status and experience as licensed general contractors is very limited and would not encompass the analysis and recommendations typically encountered with foundation repair. It is within the realm of a general contractor to recommend certain

work to restore the prior condition, such as pointing up mortar joints, replacing portions of a foundation wall, replacing damaged joists, etc., but not analyzing the reason for failure, making the recommendations for a support system, or performing calculations and specifying the design for the repair. The Board has had occasion to differentiate “like-kind replacements” by contractors from a change in the design and performance of the system. An example of a like-kind replacement is a roofing replacement where the same type system and materials are used, matching the original roofing. A change to a different roofing system, such as from built-up to membrane, or any changes to the loads, or any impact on the structural system would require a PE. As a General Contractor, if a foundation failure is suspected the client should be referred to a properly licensed PE and engineering firm for an evaluation. There may be reasons for the failure that should be addressed. The analysis, recommendation and design of a solution must be done by a PE.

- c) **Manufacturers of the Foundation Repair Systems.** The foundation repair companies cannot simply leave it to the manufacturers of their products (helical piers, grout, etc.) to design and test the products, even if using licensed engineers for the product design, and simply install the products per the specs of the manufacturer. This does not account for making the initial determination that there is foundation failure, the extent of any repair required, type of support, spacing and many other conditions, along with taking responsibility to protect the client. The PE is required to account for the actual field conditions.
  
- d) **Home Inspectors.** A licensed Home Inspector may note that there may be an issue with a foundation or structural component, but the client should be referred to a properly licensed PE and engineering firm for an evaluation as noted above in paragraph b) applicable to General Contractors. This is consistent with the Home Inspector Licensure Board Rule 11 NCAC 08 .1103(b)(3)(D) and the education provided by that Board.