



# Designing Foundations using the Fuller Pile

1.0 PDH or 1.0 Continuing Education Hour



## COURSE LEARNING OBJECTIVES:

### **Structural Design Provisions**

Select and detail Fuller Pile foundations for buildings and other structures

### **Geotechnical Design Provisions**

Use vertical and lateral soil capacity information to appropriately address soil-structure interaction and liquefaction where applicable.

### **Construction Considerations**

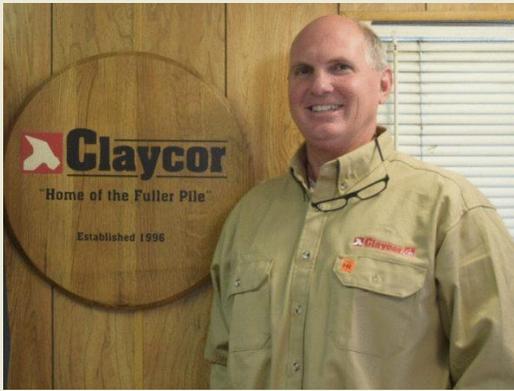
Discuss construction sequence and benefits associated with Fuller Pile installations.

## Seminar Description

This course has been developed for those interested in the technical development of and applications for the Fuller Pile.

Typical questions answered during this course include:

- 1) What is the Fuller Pile and how does it meet the requirements of the International Building Code?
- 2) How is the Fuller Pile designed and detailed?
- 3) What does a delegated design package include?
- 4) What is the difference between “conventional” and “high lateral load” Fuller Piles?



## Andrew C. Fuller, President

Mr. Fuller graduated from The University of South Carolina in 1995. Upon graduation, he decided to go out on his own and opened Claycor Contractors, Inc. in May of 1995. Claycor's first major project using a standard helical pile was The Sanctuary on Kiawah Island. This 225-room hotel was the largest project being developed on the East Coast at this time by contractor Beers-Skanska. He expanded his knowledge about the challenges of installing these pilings in residential and commercial situations and recognized that the structural capacity was limited in many applications. In his search for a stronger pile, he extended his knowledge to pressure-grouted micropiles and found that although micropiles had unique benefits, this foundation type also had many inherent problems and limitations.

In search for another solution, he spent four years experimenting and developed the Fuller Pile. Research and development has led to Fuller Pile capacities exceeding 200 tons per pile. Fuller Pile projects have included residential and commercial buildings, private bridges, entire city blocks in downtown Charleston, boutique hotels, electric substations, and large industrial projects for clients such as Nucor Steel.

# Engineering Speakers

Timothy W. Mays, Ph.D., P.E. and Ryan Keiper, P.E.



Timothy Wayne Mays, Ph.D., P.E. is President of SE/ES and a Professor of Civil Engineering at The Citadel in Charleston, SC. Dr. Mays served as the founding Executive Director of the Structural Engineers Associations of South Carolina and North Carolina. He currently serves as NCSEA Publications Committee Chairman. He has received three national teaching awards (ASCE, NSPE, and NCSEA) and both national (NSF) and regional (ASEE) awards for outstanding research. He is a prolific speaker who sits on code writing committees and his areas of expertise are code applications, foundations, structural design, seismic design, steel connections, structural dynamics, and civil engineering aspects of antiterrorism. Dr. Mays has over 20 years of experience in the design of award winning buildings, bridges, and marine structures.

From transportation projects to commercial development to earthquake engineering, Mr. Keiper brings strong geotechnical expertise and experience to bear for diverse clients. He earned his BS degree from The Citadel and completed his MS at the University of California, Berkeley, where he studied geotechnical and seismic engineering.

As a geotechnical consultant based in Charleston, SC since 2011, his projects serve both governmental agencies, especially SCDOT and South Carolina State Ports Authority, and commercial enterprises. In 2018 Mr. Keiper and his partners founded Insight Group, a geotechnical, environmental and construction materials testing firm based in North Charleston, SC. The firm has grown to 60 employees and has project offices throughout the southeast.