



PREMIUM TECHNICAL SERVICES CORP.

Keeping America's Foundations Secure

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Case Study Location: Evertrust Plaza

Project Specifications	
Location	One Evertrust Plaza, Jersey City, NJ
Installer	Ratto Construction Company
Project Engineer	L.S. Engineering Associates Corp.
Pile Specifications	<ul style="list-style-type: none"> - 148 MacLean Power Systems Helical Piles <ul style="list-style-type: none"> - D15 8", 10", 12" x 7' lead w/ D15 Round Corner Square (RCS) Extensions (2" Round Corner Square leads w/ 2" RCS extensions) - 74 of the 148 Total Piles were battered (installed at an angle) and required a D15 14" follower (2" RCS extension w/ single 14" helix) - Average Depth of Vertical Piles: 27' - Average Depth of Batter Piles: 32' @ Varying Angles - Average Torque of Vertical Piles: 6,000 FT-LB - Average Torque of Batter Piles: 15,000 FT-LB
Ultimate Loads	Vertical Helical Piles: 60 kip Battered Helical Piles: 150 kip



With increasing concerns of hurricanes passing through the Northeast after the devastating effects of Hurricane Sandy, many cities are building preventative measures to counter the possible effects of these storms. Since One Evertrust Plaza is less than 1,500 feet from the Hudson River, the building needed extra protection against storm surge and its accompanying floodwater. This project was for the construction of a new concrete floodwall to protect the multiple generators that power the building. On site, there were many underground obstructions that other types of piles may not have been able to work around. MPS helical piles were chosen by the installer to bypass the gas lines, sewer lines, and more without issue. Further, the job site was less than 6 feet from concrete sidewalks, which were left completely undisturbed due to the piles' vibration-free installation. The construction of the floodwall called for a portion of the helical piles to be battered, meaning to be installed at an angle, in order to counter any lateral loads that possible floodwater and debris could exert on it. One of Premium Technical Services' certified installers, Ratto Construction, was contracted to install a total of 148 MacLean helical piles at a depth of 27' and minimum torque of 6,000 ft-lbs for the vertical piles, and a depth of 32' for the battered piles (at varying angles) with a minimum torque of 15,000 ft-lbs. All of the helical piles were safely and successfully installed in 10 days.

