Steel Push Piers

Steel push piers are the most common foundation repair product used today. And when it comes to foundation repair, Earth Contact Products (ECP) is "The Very Best" manufacturer in the industry. From our family of foundation underpinning products to our concentric and eccentric steel resistance piers, you can count on ECP to provide products that are Designed and Engineered to Perform.

The ECP Steel Pier™ belongs to a family of patented foundation repair products that are sometimes referred to as micro piles, push piers, or resistance piers. The patented ECP Steel Pier is the standard for all priering methods in the foundation repair industry and the top choice for professional foundation repair contractors.

Earth Contact Products offers two basic engineered designs of our patented steel push pier. The concentric pier, installs directly below the footing or load, and the eccentric pier, which installs to the side of the intended load. Due to a large amount of engineering and field trials both systems work equally well in their basic duty of supporting a foundation load. It is generally the unique application that determines which model of steel pier, not the design of the pier itself.

Introduction to Steel Piers

The ECP Steel Pier™ like other resistance piers is an end-bearing pier that does not rely upon nor requires skin friction to produce support, unlike concrete cylinders. Each pier is field load tested after it is installed. These push piers are able to develop a factor of safety because the piers are installed and load tested individually using the maximum weight of the structure as the reaction force. The ability of the system to develop significant factors of safety comes from the different foundation lifting methods used between pier installation and load transfer during restoration.

ECP Steel Piers are driven individually and the entire structure works as the reaction. A friction reduction collar is attached to the lead section of the galvanized pier pipe. The purpose of the collar is to create an opening in the soil that has a larger diameter than the pier pipe. This dramatically reduces the skin friction on the pier pipe as it is driven into the soil and allows the installer to load test and verify that the pier encountered firm bearing stratum or rock that is suitable to support the design load.

During load transfer or lift, high pressure hydraulic jacks are placed at multiple locations thus reducing the load on each resistance pier to only the design working load. These hydraulic jacks are connected to the ECP Manifold System to provide a synchronized lift or stabilization of the structure. A building with substantial construction and rigidity can develop greater pier factor safeties than lighter or weaker structures. Contact an ECP foundation repair contractor or registered foundation engineer to help you evaluate and solve your foundations problem.
Types Steel Piers

- ECP Model 400
- ECP Model 350
- ECP Model 300
- ECP Model 200
- ECP Model 166

Remember, not all resistance piers are equal, on your next project make the ECP Steel Pier™ your foundation repair solution of choice.

* See the "Pier Eccentric Installation Sequence" download for reference
ECP Steel Piers are the #1 choice for foundation repair professionals and foundation design engineers. For more technical information about the patented ECP Steel Piers, go to the ECP Engineering section.

* See the "Pier Concentric Installation Sequence" download for reference