

GEOPIER®

GROUTED IMPACT® SYSTEM Rigid Inclusion Technology



The Geopier Grouted Impact® system uses our traditional Impact pier with grout added to the open-graded aggregate during installation. Grout is introduced to the system within the mandrel and mixed in place to create a high-strength grout-aggregate mix. The end result is a very stiff, cemented pier element that provides confinement in weak soils and excellent settlement control for heavily-loaded structures.

APPLICABLE SOIL TYPES

- Organic soils
- Very soft clays and silts

DESIGN CONSIDERATIONS

- Can be used for most Geopier applications
- Can be installed to depths of 40+ feet
- Ideal for organic soils, heavy loads, or adjacent structures
- Ideal for typical settlement tolerances (1 inch total; ½ inch differential)
- Foundations can be designed as conventional spread footings with bearing pressures up to 10+ ksf
- Slabs can be constructed as conventional slab-on-grade
- Can be used for uplift resistance

CONSTRUCTION CONSIDERATIONS

- No spoils/haul-off – ideal for environmentally impacted sites
- Often results in 20% to 50% cost savings compared to traditional alternatives (removal and replacement and deep foundations)
- Rapid installation process means shorter construction schedules

INSTALLATION PROCESS

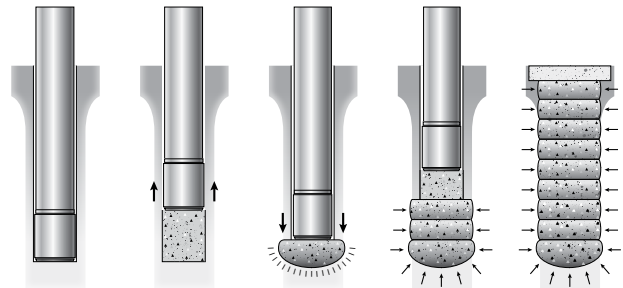
The grouted Impact pier installation process is essentially the same as the traditional Impact pier with the exception that grout is added continuously during installation.

Step 1: Advance the displacement mandrel through unsuitable soils to the desired design depth.

Step 2: Withdraw the mandrel several feet to allow the grout and open-graded aggregate mix to flow into the annular space.

Step 3: Redrive the mandrel to densify the recently placed grout/aggregate mix and surrounding soils.

Step 4: Repeat steps 2 and 3 to construct a grouted pier element in 2-foot-thick lifts to the ground surface.



Watch system installation videos at www.geopier.com

Whether you are an engineer, contractor, or owner - We can help.

For more information on Geopier solutions, call **800-371-7470**, visit www.geopier.com or email info@geopier.com

