

# GEOPIER®

## GP3® SYSTEM Rammed Aggregate Pier® Technology



The GP3® pier system is Geopier's primary "drill and fill" solution. This system is ideal for non-caving soils that stay open during drilling. GP3 piers are constructed using a track-mounted auger to drill out unsuitable soils and a patented track-mounted tamper to construct the Rammed Aggregate Pier (RAP) elements. The end result is a dense column of aggregate surrounded by stiffened matrix soils that provide excellent settlement control and allow for higher bearing capacities. The GP3 system is one of Geopier's oldest systems, with several thousand successful projects in the ground.

### APPLICABLE SOIL TYPES

- Non-caving soils such as clays, silts, and sands with high fines content
- Caving soils with the use of temporary casing
- Organic soils using cemented treated aggregate (CTA)

### DESIGN CONSIDERATIONS

- Can be used for any Geopier application
- Can be installed to depths of 25+ feet
- CTA piers are 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 typical bearing pressures of 3 to 8 ksf for RAP/ 10+ ksf with CTA
- Slabs can be constructed as conventional slab-on-grade
- Can be used for uplift and lateral resistance

### CONSTRUCTION CONSIDERATIONS

- Generates minimal spoils compared to removal and replacement
- 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

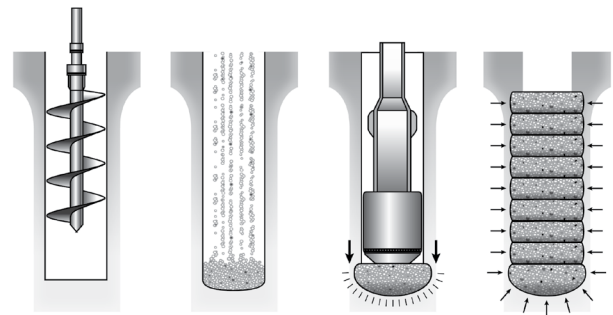
Geopier's GP3 installation process consists of the following:

**Step 1:** Drill out the unsuitable soils to the desired design depth using an auger.

**Step 2:** Place aggregate at the bottom of the shaft.

**Step 3:** Densify the open-graded aggregate and surrounding soils using a patented tamper to create a "bottom bulb."

**Step 4:** Place and densify aggregate in 2-foot-thick compacted lifts to the ground surface.



Watch system installation videos at [www.geopier.com](http://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](http://www.geopier.com) or email [info@geopier.com](mailto:info@geopier.com)

