

## The Worry-Free Foundation System

Helical Piers Used with the Slabtek Lifting Mechanism form the backbone of a proven and patented system for elevating slab-on-grade foundations, creating a protective void between the slab and soil. This innovative system isolates the foundation from damage which can be caused by the heave and contraction of active soils.



# **Helical Pier Advantages**

- Many times, faster to install than concrete piers.
- Configurable load capacity
- No waiting for concrete to cure / no pier spoils
- Suitable for sites with high water tables
- No costly surprises if water encountered during drill.
- Installed with lightweight track loaders.
- Installation less susceptible to weather delays
- Low-cost alternative to steel-cased piers

## A Modern Alternative to Cast-in-Place Concrete Piers

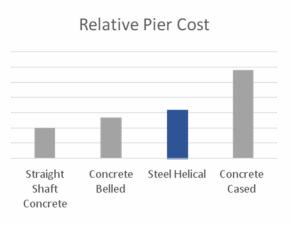
Steel Helical Piers are a modern alternative to cast-in-place concrete piers. They are especially suited to situations in which the geotechnical soils report indicates the presence of water, or if moisture is encountered during the pier drilling process. Encountering water while drilling a shaft for a concrete pier can result in the need to retrofit with belled piers or very expensive steel-cased concrete piers causing significant cost increases and schedule delays.



SlabTek installation crew carefully monitors the Helical Pier Angle, Depth, and Torque

Helical piers provide direct cost savings vs. steel-cased piers and some belled piers, and also provide significant cost savings in all installations by reducing concrete material requirements, construction time, and downtime following rainy periods.

Helical pier shaft thickness, the number and size of the helices, and installation depth are specified to the unique soil conditions at each job site and the axial load requirements of each foundation design.



#### **Time is Money: Helical Piers Reduce Construction Time**



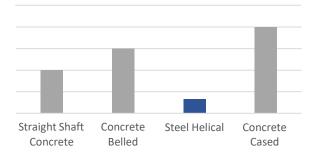
Multiple Helical Piers can be installed simultaneously reducing construction time.



Helical Piers installed together with heavy concrete piers used to carry the structural load while Helical Piers carry the slab load. In the time it takes to drill the shaft for a typical concrete pier, multiple helical piers can be installed with a single piece of equipment. In addition, there are no spoils to dispose of, no reinforcement to fabricate or install, and no waiting for concrete to cure.

In situations where belled or cased concrete piers would be required, the time savings are even larger.

Running two or more installation rigs simultaneously allows even large jobs to be completed in a single day.



**Relative Pier Installation Time** 

Helical Piers are installed with lightweight track loaders or skid-steer loaders.

Because this equipment is much smaller & lighter than typical drill trucks, helical piers can be installed much sooner after a rain.

#### Helical Piers Provide an Efficient and Clean Job Site



Properly installed, helical piers must be driven deep enough to provide proper load-bearing capacity with the top helix below the active soil layer.

Once the helical piers are installed to the proper depth & torque, they are cut to the proper elevation per the foundation design.

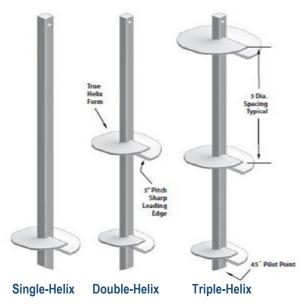
For installations requiring additional lateral stability, a short concrete cap is installed at the top of the pier. The SlabTek System Lifting Mechanism is then attached to the pier shaft.

#### Helical Piers Offer a Range of Load Bearing Capacities

	<u>TF005</u>	<u>TF150</u>	<u>TF175</u>	<b>TF200</b>
Working Load:	28.5 kips	35 kips	50 kips	80 kips
Ultimate Load:	57 kips	70 kips	100 kips	160 kips

#### **Example Lead Sections**

Helical Piers come in a variety of load-bearing capacities and various helix plate configurations. Slab-Tek works with your project's structural engineer to assure that every helical is specified to carry the proper load of your structure.



For more information contact:



2505 N. Plano Road. Suite 4000 Richardson, TX 75082 www.SlabTekCompany.com

Phone: 214.451.6630

This product and implementation of suspended slabs using this product are protected by the following: US Patents: 8458984, 8671627, 8407898, 8678712, 7823341 B2, 8069620 B2. Canadian Patent: 2628422