

CHANCE[®] Helical Tieback Anchors



Better tieback walls with CHANCE® Helical Tieback Anchors

Typical construction applications:

- Building-site preparation
- Roadways
- Retaining walls

- Levees
- Dams
- Revetments

Features

- Predictable results
- Cost-effective method
- Easy to store, reusable
- Pre-engineered system
- Labor-saving, keeps crew small
- Screws into place (not predrilled)
- Site-specific to conditions and loads
- Terminations for various threadbars
- Less equipment than grouted tendons
- Bearing device, not friction dependent
- Extendable with bolted joint connection



Benefits

- Installs in any weather
- Installs in limited access areas
- No excavation or spoils to remove
- Immediate proof testing and loading
- Permanent or temporary (removable)
- Labor saving as few as four on a crew
- Capacity proportional to installing torque
- No concrete trucks or grout pumps needed
- Install with equipment for grouted tendons

Faster tieback walls with all the practical advantages of Helical Anchors



• Immediate pull testing of helical tieback anchors after installation serves as a check on design procedures and eliminates deflection at working loads.

No delays because there is no grout

- Typical production rate of 30 to 40 per day for installing and testing
- No holes to drill Cuts labor and equipment costs
- Can save 30 per cent while obtaining high anchor-load capacities

Solves construction problems

- In cohesive soils, no belled and/or long sockets
- In non-cohesive soils, no casings or grouted sockets
- Bearing mode (not friction mode) anchors
- No de-watering for below-water-table applications

• HeliCAP® Engineering Software

• Sample Specs



Design and build means just that with HeliCAP[®] Software!

HeliCAP[®] Engineering Software helps design professionals quickly derive the proper helical tieback anchor for site- and load-specific data. For a free demo, visit www.abchance. com. Then contact your local Distributor or Territory Manager about how to get a copy for your PC.



Site-specific basics of screw anchor design

Two typical steps to anchorage design:

- 1. Select helix configuration based on accurate soil characteristics data and tension load.
- 2. Select shaft configuration based on tension load and anticipated installation torque.
- Anchor load capacity equals the sum of all its individual helix bearing capacities. Bearing capacity of each helix equals the product of its projected area and bearing pressure.
- Pre-engineered CHANCE[®] screw anchors optimize helix spacing at three times the next lower helix diameter. This assures more predictable torque-to-capacity relationship.
- Holding capacity is proportional to installation torque (recommended 10 lb per ft-lb).
- Monitor torque while installing to ensure a minimum and not to exceed anchor rating.
- CSI guide specs and our model specifications are available on www.abchance.com



Helical Tieback

Helical Tieback Anchors have shafts in four square sizes (1-1/2", 1-3/4", 2" and 2-1/4") with helices in configurations of two to four and diameters from 6" to 14". All components are available hot-dip galvanized per ASTM A 153 after fabrication.



Extensions

Plain and helical extensions are used to reach competent load-bearing soil. Plain extensions range from 37" to 124" long. Helical extensions range from 48" to 124" long with 14"-diameter helices in single, double and triple configurations.

Forged integral coupling sockets bolt-up quickly and efficently transfer installing torque.



Lead Sections

For job-specific combinations, leading sections range from 30" to 124" long in two-, three- or four-helix configurations usually with increasing diameters from the 6", 8", 10", 12" and 14" range.

Anchor System

Terminations fit threadbar or provide a threaded stud to work with prefabricated or site-made lockoff devices. Other termination fittings also are available. In some cases, the through-hole at the shaft end may be simply crosspinned.



• Threaded Stud Socket Adapter for 1-1/2" Tieback Anchors



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Helical Tieback Anchor Type	Size inches (mm)	Torque Rating ft-lb (N-m)	Ultimate Capacity* kip (kN)
SS5	1.50	5,500	55
Square Shaft	(38.1)	(7,500)	(245)
SS150	1.50	7,000	70
Square Shaft	(38.1)	(9,500)	(312)
SS175	1.75	10,000	100
Square Shaft	(44.5)	(13,600)	(445)
SS200	2.00	15,000	150
Square Shaft	(50.8)	(20,300)	(668)
SS225	2.25	20,000	200
Square Shaft	(57.2)	(27,100)	(890)

* The Ultimate Capacity is based on the Installation Torque-Capacity relationship in soil.

For more detailed design information, contact your local Civil Construction distributor found at www.abchance.com.

Calculate bearing capacities using our exclusive HeliCAP[®] Engineering Software. Demo available at www.abchance.com.

Anchoring the World

Since 1912, Chance has been the international leader in earth anchoring. Our helical piers and anchors are used worldwide to secure soil retention projects and deep foundation applications such as residential and commercial buildings, tower foundations and heavy equipment foundations.

Engineered for dependability and long-term stability, CHANCE[®] helical piers and anchors feature exclusive anchoring techniques, tools, designs and sizes that make other foundation methods a thing of the past.

Approved by all national building code agencies, CHANCE[®] helical piers and anchors are your first line of defense against poor soil conditions, landslides, floods and time.

Demand A Better Foundation

With nearly 400 dealers and distributors worldwide, Chance is ready to provide you everything you need to get the job done right. Chance offers engineering guidance, field supervision, accessibility, warehouses, material traceability, AWCcertified welders, technical support and complete documentation.

Ask a distributor near you for our comprehensive design manual (hardcopy or CD) or download a complete CSI Manu-Spec[®] online. Demand a better foundation today. Locate your nearest distributor at www.abchance.com.

Down. Right. Solid.

Our tagline is our promise. CHANCE[®] helical piers and anchors go **down** with power into the ground and are accurate, level and **right** the first time. The result is **solid** stability.



DOWN. RIGHT. SOLID.

www.abchance.com



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ecause Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without

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