

Terra-Lock™ Earth Percussion Anchors are designed to provide drive efficiency and maximize load capacity across a wide range of applications. The Terra-Lock™ 100 load bearing plate has an open face allowing for vegetation establishment. Terra-Lock™ anchors assemblies are all preassembled with specific Anchor Heads, Cable Tendon, and Bearing Plates. Patented Gripple technology allows for re-tensioning and negates the need for time consuming crimping.

System Performance

Anchor Load Range ⁽⁴⁾	300 - 800 lbs
Maximum Working Load ⁽⁴⁾	990 lbs
Ultimate Assembly Strength	1,100 lbs
Ultimate Cable Strength	1,800 lbs

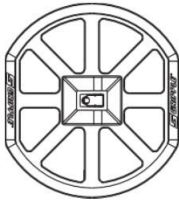
⁽⁴⁾ Values are soil dependent; See graph on the following page.

Component	Type	Material	Test Method	Physical Properties
Top Bearing Plate	TL-100	Zinc-Aluminum Alloy - ZA 2 ⁽¹⁾	ASTM B-240-10	Diameter: 4.25" Thickness: 0.11" 64% Open Area
Anchor Head	TLA3	Zinc-Aluminum Alloy - ZA 2 ⁽¹⁾	ASTM B-240-10	5.00" x 1.62" x 1.23" (L x W x H) Bearing Area: 6 in ²
Cable Tendon	3MM-S	Stainless Steel Type 316 ⁽²⁾	ASTMA-1023	Diameter: 3 mm (1/8") 1x19 Strand
Top Termination	TL-100	Zinc-Aluminum Alloy - ZA2 & Ceramic ⁽³⁾	ASTM B-240-10	Diameter: 4.25" Thickness: 0.11"
Lower Termination	Ferrule	Stainless Steel	ASTMA1058-14	Length: 12.8 mm Wall thickness: 1.5 mm

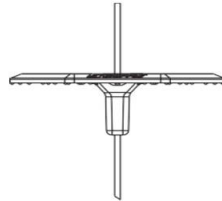
⁽¹⁾ Corrosion resistant pressure die cast zinc alloy

⁽²⁾ Corrosion resistant stainless steel cable

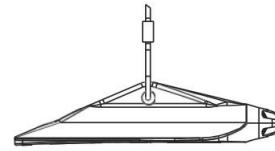
⁽³⁾ Corrosion resistant pressure die cast zinc alloy with internal a ceramic roller & directional locking device



TL-100 – Top



TL-100 – Side



TL-A3 – Side

SPT Count & Grippler Anchor Performance

General information

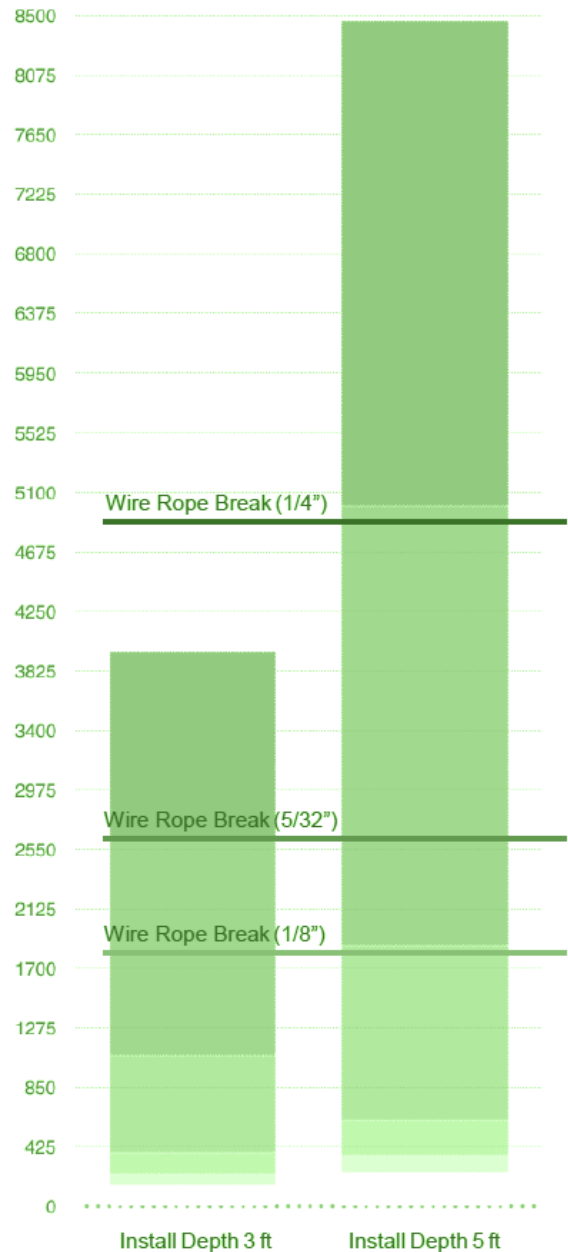
The Standard Penetration Test (SPT) is widely used to determine the strength and deformation properties of the course soil. Approximate correlation of properties of drained granular soil are:

Very Loose	SPT 0-4
Loose	SPT 4-10
Medium Dense	SPT 10-30
Dense	SPT 30-50
Very Dense	> 50

These figures can then be used to obtain typical shear strength and bulk unit weight for each soil.

This information is then used to predict Grippler Anchor Performance in relation to the conditions described.

The following graphs are derived from idealized theoretical calculations and should be used as a guide only. The variability of soil types should always be taken into account and on-site testing should always be carried out in order to obtain more accurate results.



Soil Density	Anchor Performance (lbs)			
	Install Depth 3 ft		Install Depth 5 ft	
Very Loose	154	231	238	366
Loose	231	381	366	615
Medium Dense	381	1073	615	1862
Dense	1073	2610	1862	5007
Very Dense	2610	3961	5007	8466
Wire Rope Break	(1/8") – 1800lbs			
	(3/16") – 3300lbs			
	(1/4") – 5000lbs			