

**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 <sup>(4)</sup>    | 150 - 600 lbs |
| Maximum Working Load <sup>(4)</sup> | 990 lbs       |
| Ultimate Assembly Strength          | 1,100 lbs     |
| Ultimate Cable Strength             | 1,800 lbs     |

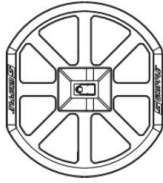
<sup>(4)</sup> Values are soil dependent; See graph on the following page.

| Component         | Type    | Material  | Test Method   | Physical Properties   |
|-------------------|---------|---|---------------|---|
| Top Bearing Plate | TL-100  | Zinc-Aluminum Alloy - ZA 2 <sup>(1)</sup>           | ASTM B-240-10 | Diameter: 4.25"<br>Thickness: 0.11"<br>64% Open Area                    |
| Anchor Head       | TLA2    | Zinc-Aluminum Alloy - ZA 2 <sup>(1)</sup>           | ASTM B-240-10 | 3.44" x 1.22" x 0.81"<br>(L x W x H)<br>Bearing Area: 3 in <sup>2</sup> |
| Cable Tendon      | 3MM-S   | Stainless Steel TYPE 316 <sup>(2)</sup>             | ASTMA-1023    | Diameter: 3 mm (1/8")<br>1x19 Strand                                    |
| Top Termination   | TL-100  | Zinc-Aluminum Alloy - ZA 2 & Ceramic <sup>(3)</sup> | ASTM B-240-10 | Diameter: 4.25"<br>Thickness: 0.11"                                     |
| Lower Termination | Ferrule | Stainless Steel                                     | ASTMA1058-14  | Length: 12.8 mm<br>Wall thickness: 1.5 mm                               |

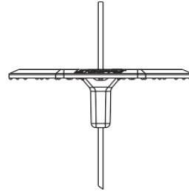
<sup>(1)</sup> Corrosion resistant pressure die cast zinc alloy

<sup>(2)</sup> Corrosion resistant stainless steel cable

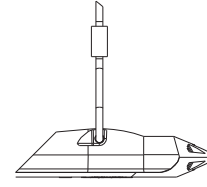
<sup>(3)</sup> Corrosion resistant pressure die cast zinc alloy with internal a ceramic roller & directional locking device



TL-100 – Top



TL-100 – Side



TL-A2 – 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      | 80                       | 123  | 125                | 194  |
| Loose           | 123                      | 207  | 194                | 328  |
| Medium Dense    | 207                      | 282  | 621                | 1022 |
| Dense           | 621                      | 1653 | 1022               | 2872 |
| Very Dense      | 1653                     | 2764 | 2872               | 5052 |
| Wire Rope Break | (1/8") – 1800lbs         |      |                    |      |
|                 | (3/16") – 3300lbs        |      |                    |      |
|                 | (1/4") – 5000lbs         |      |                    |      |

