MPS Civil Products

Duckbill Earth Anchors

Features >>>

- Tree Support
- Theft Deterrent
- Erosion Control
- Multi-Purpose

Benefits >>>

- Faster Installation and Penetrates Harder Soils
- Quicker Loading, Stronger Hold
- More Stable Drive Plane Installation Angle

Breakthrough Earth Anchoring Technology

DUCKBILL® EARTH ANCHORS

The Duckbill Anchor Principle >>>

Saving time and labor, patented Duckbill® Anchors work like toggle bolts in the soil.

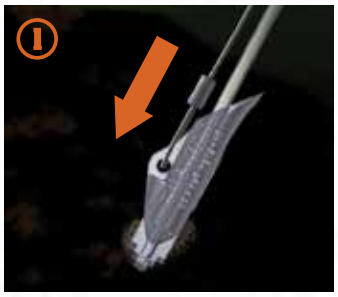
Duckbill Anchors are driven into the ground (with no holes, no digging and no concrete), providing a safe and environmentally sensitive installation.

An upward pull on the anchor tendon rotates the Duckbill Anchor into a perpendicular “load lock” position in undisturbed soil.

Duckbill Anchor systems offer the most effective, lightweight, economical solutions to any anchoring application, large or small.

Models >>>

How It Works >>>



Drive Anchor

Remove Drive Steel

Pull On Wire Rope

Load Locked

1. Drive anchor into the soil using a hammer and drive steel rod (a small jack hammer can also be used with power drive steel).
2. Once anchor is at the proper depth, remove the drive steel.
3. Set the anchor in the soil by pulling up on the wire rope.
4. The upward pull on the wire rope rotates the anchor into a perpendicular load locked position.

> **Safe**

> **Strong**

> **Easy to Install**

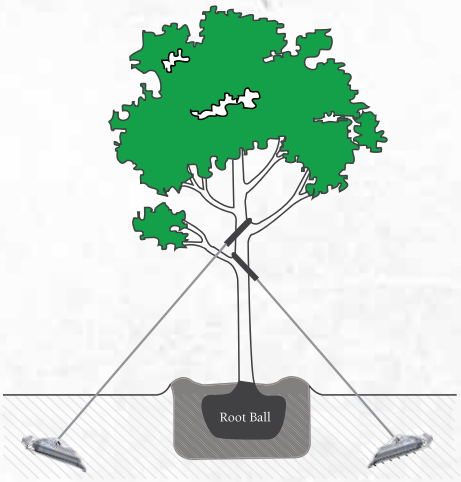
Tree Support Kits

No time wasted assembling various components. With Duckbill Anchors, everything is done for you. All kits are available with galvanized steel, clear or highly visible orange / white vinyl coated wire rope.

The Advantages

- Easy, safe installation
- More trees anchored per hour
- Professional appearance

**One kit anchors one tree. Drive steel additional.*



Tree Support Kit Specifications

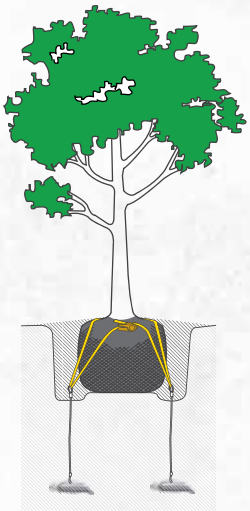
Product	Model 40 DTS Kit For trees up to 3 in (75 mm) diameter	Model 68 DTS Kit For trees up to 6 in (150 mm) diameter	Model 88 DTS Kit For trees up to 11 in (279 mm) diameter
Kit Contents	- 3 DUCKBILL® anchors - 12 ft (3.6 m) of wire rope per anchor attached - 3 tree collars - 3 1/16 in (1.6 mm) wire rope clamps	- 3 DUCKBILL® anchors - 13 ft (4 m) of wire rope per anchor attached - 3 tree collars - 6 1/8 in (3.2 mm) wire rope clamps	- 3 DUCKBILL® anchors - 15 ft (4.6 m) of wire rope per anchor attached - 3 tree collars - 6 3/16 in (4.8 mm) wire rope clamps
Capacity (Per Anchor)	300 lbs (1.33 kN) in normal soil	1,100 lbs (4.89 kN) in normal soil	3,000 lbs (13.39 kN) in normal soil
Standard Case & Weight	12 units at 10 lbs (4.6 kg)	6 units at 24 lbs (11 kg)	4 units at 30 lbs (13.5 kg)

Drive Steel for DUCKBILL Anchors >>>

Model 40	Model 68	Model 88	Model 138
DS-40: 3/8 in (9.7 mm) round 2 ft (0.6 m) long hand drive steel with large striking head	**DS-68:** 1/2 in (12.7 mm) round 3 ft (0.9 m) long hand drive steel with large striking head **DS-68 HD (Heavy Duty):** 3/4 in (19 mm) round 4 ft (1.2 m) long hand drive steel with large striking head **Power Drive Steel:** 4 ft (1.2 m) drive tip to under collar, for use with mechanized jack hammer	**DS-88:** 3/4 in (19 mm) round 4 ft (1.2 m) long hand drive steel with large striking head **Power Drive Steel:** 4 ft (1.2 m) drive tip to under collar, for use with mechanized jack hammer	**Power Drive Steel:** 5 ft (1.6 m) drive tip to under collar, for use with mechanized jack hammer

Rootball Kits

Perfect when guy systems are not possible or desirable, such as in playgrounds or where sidewalk plantings are required. A completely underground system designed to hold the root ball firmly in place.



The Advantages

- Fast, easy, safe installation
- No poles or stakes
- Completely underground

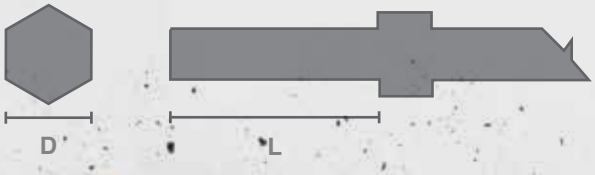
**One kit anchors one tree. Drive steel additional.*

Rootball Kit Specifications

Product	Model 40 RBK Kit For trees up to 2 in (50 mm diameter	Model 68 RBK Kit For trees up to 3 in (75 mm) diameter	Model 88 RBK Kit For trees up to 6 in (150 mm diameter
Kit Contents	- 3 DUCKBILL® anchors with D-ring - 1 6ft strap with hand ratchet	- 3 DUCKBILL® anchors with D-ring - 1 20ft strap with hand ratchet	- 3 DUCKBILL® anchors with D-ring - 1 21ft strap with hand ratchet
Capacity (Per Anchor)	300 lbs (1.33 kN) in normal soil	1,100 lbs (4.89 kN) in normal soil	3,000 lbs (13.39 kN) in normal soil
Standard Case & Weight	6 units at 6.71 lbs (3 kg)	6 units at 13 lbs (6 kg)	6 units at 32 lbs (14.5 kg)

How to Select Power Drive Steel

1. Determine the Duckbill Anchor to be installed.
2. Measure hex size (**D**) across flats of a shank that fits the hammer
3. Measure shank length (**L**) from top of hex to bottom of collar
4. Call with special shank sizes or if you need more information on determining what drive steel is needed.



Each Duckbill Anchor has unique drive steel determined by the jack hammer and the anchor model.

EXAMPLE: For a Model 88 Anchor with 1 in x 4 ¼ in shank, drive steel is PDS8810.

Part Number:

PDS 88 10

Anchor Size — Shank Code

To get the Shank Code, multiply the hex size (**D**) by the shank length (**L**).

D x L = Shank Code

1 in x 4 ¼ in = 10

Applications >>>

Duckbill Anchors are used worldwide to secure items that can be stolen, moved or blown down. Duckbill Anchors are intended for light duty applications in normal soils.

For highly corrosive environments, Duckbill Anchors can be fabricated with stainless steel wire rope, plastic impregnated wire rope or other corrosion-resistant solutions.

Ideal for:

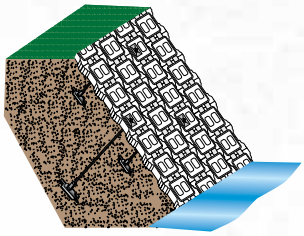
- Tree Support
- Fences
- Structures
- Tents
- Towers
- Scaffolding
- Tree Revetments
- Turf Reinforcment
- Sheds
- Theft Deterrent
- Vineyards
- And More

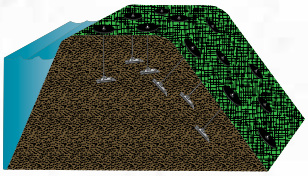
"I would like to inform you as to how the Cleveland Metroparks System utilizes your Duckbill Anchors. They are attached to both ends of a picnic table, preventing park patrons from moving the tables from their designated area. The anchors have also eliminated vandalism problems we have experienced. In the five years we have been using the Duckbill Anchor system, it has virtually solved both of these situations."

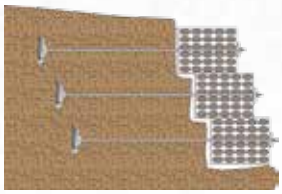
- Metroparks
Cleveland, Ohio USA

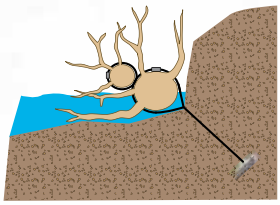
Multi-Purpose

Erosion Control


ACB Mat


TRM Mat


Gabions


Tree Revetment

Multi Purpose Specifications

	Model 40-DB1	Model 68-DB1	Model 88-DB1	Model 138-DB1
Capacity (Per Anchor)	300 lbs (1.33 kN) in normal soil	1,100 lbs (4.89 kN) in normal soil	3,000 lbs (13.39 kN) in normal soil	5,000 lbs (22.24 kN) in normal soil
Wire Rope Length	20 in (0.51 m)	2 ½ ft (0.76 m)	3 ½ ft (1.07 m)	5 ft (1.52 m)
Galvanized Wire Rope	$^{1}/_{16}$ in (1.6 mm) 7 x 7 GAC	⅛ in (3.2 mm) 7 x 7 GAC	¼ in (6.4 mm) 7 x 19 GAC	$^{5}/_{16}$ in (7.9 mm) 7 x 19 GAC
Wire Rope Breaking Strength	480 lbs (2.14 kN)	1,700 lbs (7.56 kN)	7,000 lbs (31.13 kN)	9,800 lbs (43.59 kN)
Anchor Weight	1.0 oz (28 gm)	4.5 oz (128 gm)	14 oz (397 gm)	2.5 lbs (1.1 kg)
Standard Case & Weight	50 units at 3.7 lbs (1.7 kg)	24 units at 7 lbs (3.2 kg)	12 units at 11 lbs (5.0 kg)	12 units at 32 lbs (14.5 kg)

Theft Deterrent Specifications

	Wire Rope Anti-Theft Anchors		Chain Anti-Theft Anchors	
Product	Model 68-ATI	Model 88-ATI	Model 68-ATC	Model 88-ATC
Kit Contents	- 1 DUCKBILL® anchor - 5 ft (1.5 m) of $^{3}/_{16}$ in (4.8 mm) galvanized wire rope	- 1 DUCKBILL® anchor - 6 ft (1.8 m) of ¼ in (6.4 mm) galvanized wire rope	- 1 DUCKBILL® anchor - 4 ft (1.2 m) of ¼ in (6.4mm) proof coil chain attached to 1 ft (0.3 m) of wire rope	- 1 DUCKBILL® anchor - 4 ft (1.2 m) of ¼ in (6.4 mm) proof coil chain attached to 2 ft (0.6 m) of wire rope
Capacity (Per Anchor)	1,100 lbs (1.33 kN) in normal soil	3,000 lbs (13.34 kN) in normal soil	1,100 lbs (1.33 kN) in normal soil	3,000 lbs (13.34 kN) in normal soil
Standard Case & Weight	12 units at 10 lbs (4.6 kg)	6 units at 10 lbs (4.6 kg)	12 units at 41 lbs (18.6 kg)	6 units at 27 lbs (12.3 kg)

MPS Civil Products - Building Solid Foundations.
MPS Civil Products is part of MacLean-Fogg, a diversified international manufacturing enterprise with more than half a billion dollars in sales. A result of the acquisition and merger of Joslyn, Dixie and Foresight, the three most prominent soil anchor manufacturers, MPS Civil Products is now one of the leading suppliers of steel deep foundation systems for use in residential, commercial and marine applications. Our comprehensive product line for residential and commercial applications includes engineered solutions for tension, compression and structural stabilization in many different soils. When Quality and Service is your focus, Solutions are the result.

NOTE: All underground work requires proper safety and location procedures. Do not install an anchor until you know what is below the surface. It is imperative in all cases that all anchors are fully load locked before being put in service. Foresight Products can custom engineer complete anchoring systems to meet all your specific requirements. **What do you want to anchor?**

Patented Worldwide
Nos. 7,534,073 6,237,289 D572,546

Contact us to learn more about Earth Anchors

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