

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

#### Theft Deterrent - Vineyards

- Tree Revetments

- Turf Reinforcment

- And More

- Sheds

### Multi-Purpose







Dear Foresight,

**Netroparks** 

Cleveland, Ohio USA

"I would like to inform you as to how the

Duckbill Anchors. They are attached to

Cleveland Metroparks System utilizes your

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

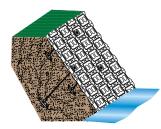
using the Duckbill Anchor system, it has

virtually solved both of these situations."

experienced. In the five years we have been



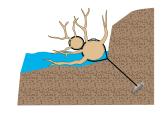
#### **Erosion Control**



ACB Mat

TRM Mat

Gabions



Tree Revetment

# **Multi Purpose Specifications**

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6 - E	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/ <sub>16</sub> in (1.6 mm) 7 x 7 GAC	1∕8 in (3.2 mm) 7 x 7 GAC	¼ in (6.4 mm) 7 x 19 GAC	<sup>5</sup> / <sub>16</sub> in (7.9 mm) 7 x 19 GAC
Wire Rope Break- ing 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	<ul> <li>1 DUCKBILL<sup>®</sup> anchor</li> <li>5 ft (1.5 m) of <sup>3</sup>/<sub>16</sub> in (4.8 mm) galvanized wire rope</li> </ul>	<ul> <li>1 DUCKBILL<sup>®</sup> anchor</li> <li>6 ft (1.8 m) of ¼ in (6.4 mm) galvanized wire rope</li> </ul>	<ul> <li>1 DUCKBILL<sup>®</sup> anchor</li> <li>4 ft (1.2 m) of ¼ in (6.4mm) proof coil chain attached to 1 ft (0.3 m) of wire rope</li> </ul>	<ul> <li>1 DUCKBILL® anchor</li> <li>4 ft (1.2 m) of ¼ in (6.4 mm) proof coil chair attached to 2 ft (0.6 m) of wire rope</li> </ul>
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)

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. 4,044,513 4,096673 4,802,317 5,031,370 D572,546

Contact us to learn more about Duckbill Earth Anchors

Toll Free: 800-325-5360 | Local: 303-286-8955 | Fax: 303-287-3866 sales@duckbill.com | www.duckbill.com





# **SERIES II**

# What do you want to anchor?

>>>

Tree Support

**Erosion Control** Theft Deterrent Multi-Purpose

#### Benefits >>>

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





**Breakthrough Earth Anchoring Technology** 





# The Duckbill **Anchor Principle**



Saving time and labor, patented Duckbill<sup>®</sup> 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.

#### **How It Works**



Drive Anchor



Pull On Wire Rope



>>>



Load Locked

#### Models

>>>



- 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.



#### **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**

roduct	Model 40 DTS Kit For trees up to 3 in (75 mm) diameter	<b>Mo</b> For
(it Contents	<ul> <li>3 DUCKBILL<sup>®</sup> anchors</li> <li>12 ft (3.6 m) of wire rope per anchor attached</li> <li>3 tree collars</li> <li>3 <sup>1</sup>/<sub>16</sub> in (1.6 mm) wire rope clamps</li> </ul>	= 3 = 13 ai = 3 = 6
	1:20	

Capacity (Per Anchor) Standard Case &

300 lbs (1.33 kN) in normal soil

12 units at 10 lbs (4.6 kg)

#### **Drive Steel for DUCKBILL Anchors**

#### Model 40

Weight

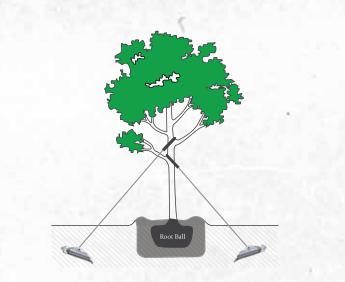
Model 68

ft (0.6 m) long hand drive steel with large striking head

ft (0.9 m) long hand drive steel with large striking head

**DS-68 HD (Heavy Duty):** <sup>3</sup>/<sub>4</sub> 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 mechaniz iack hammer



Model 88 DTS Kit

- 3 DUCKBILL® anchors

anchor attached

- 3 tree collars

= 15 ft (4.6 m) of wire rope per

#### odel 68 DTS Kit

- trees up to 6 in (150 mm) diameter For trees up to 11 in (279 mm) diameter
- DUCKBILL<sup>®</sup> anchors
- 3 ft (4 m) of wire rope per
- anchor attached
- tree collars
- 1/8 in (3.2 mm) wire rope clamps



- 1,100 lbs (4.89 kN) in normal soil 3,000 lbs (13.39 kN) in normal soil
- 6 units at 24 lbs (11 kg)



4 units at 30 lbs (13.5 kg)

#### **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	<b>Model 40 RBK Kit</b>	<b>Model 68 RBK Kit</b>	Model 88 RBK Kit
	For trees up to 2 in (50 mm)	For trees up to 3 in (75 mm) diam-	For trees up to 6 in (150 mm)
	diameter	eter	diameter
Kit Contents	<ul> <li>3 DUCKBILL<sup>®</sup> anchors</li></ul>	<ul> <li>3 DUCKBILL<sup>®</sup> anchors with</li></ul>	<ul> <li>3 DUCKBILL<sup>®</sup> anchors with</li></ul>
	with D-ring <li>1 6ft strap with hand ratchet</li>	D-ring <li>1 20ft strap with hand ratchet</li>	D-ring <li>1 21ft strap with hand ratched</li>
Capacity	300 lbs (1.33 kN) in normal	1,100 lbs (4.89 kN) in normal	3,000 lbs (13.39 kN) in norma
(Per Anchor)	soil	soil	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)

# >>>

#### Model 88

**DS-40:** % in (9.7 mm) round 2 **DS-68:** ½ in (12.7 mm) round 3 **DS-88:** ¾ 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 iack hammer

- Model 138 **Power Drive Steel:**
- 5 ft (1.6 m) drive tip to under collar, for use with mechanized jack hammer

#### 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 <sup>1</sup>/<sub>4</sub> in shank, drive steel is PDS8810.

Part	Numb	er:	
PDS	88 J Anchor Size	10 J Shank Code	

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

 $D \times L =$  Shank Code  $1 \text{ in } \times 4 \frac{1}{4} \text{ in } = 10$ 

