

Three-Part Specifications - Copyright 2015 - Nixalite® of America Inc

BOUNDARY™ Deer & Perimeter Fence

Includes specifications for: BOUNDARY Lightweight, Standard, Extra Tall, Extra Strength and Maximum Strength Deer & Perimeter Fence Product Lines.

Nixalite's **BOUNDARY Deer & Perimeter Fence** is an extruded, knotless fence that is available in six (6) different construction grades; **Lightweight, Standard, Xtra Tall, Xtra Strength, Max Strength and UltraMax**. All BOUNDARY fence products are **Made in the USA** from durable, UV resistant extruded black polypropylene. Fence sizes range from 4 to 15 feet high and from 100 to 330 feet long. Use BOUNDARY Fence as an economical fence enclosure system that can be less expensive than a similar sized wood or metal fence system.

All BOUNDARY Fence products can be used as perimeter or property line fencing. For use as **Deer Barrier Fencing**, use only the taller BOUNDARY Fence sizes (7.5', 8', 10', 13' and 15' tall). For long term outdoor applications, use the Xtra, Max or UltraMax strength grade fences. All other grades are for seasonal applications and should be stored during off season periods. Nixalite offers fence hardware and accessories to help you complete your BOUNDARY Fence installation.

The following outline is presented in a **modular format** making it simple to include or exclude any combination of the BOUNDARY Fence system as needed for each project and or enclosure.

List Nixalite BOUNDARY Fence 3-part specifications in the following locations;

Master Format 1995 – Division 10290 – Bird & Pest Control

Master Format 1995 – Division 02825 – Fences, Gates & Hardware

Master Format 2004 – 10 81 00 - Pest Control Devices

Master Format 2004 – 32 31 00 – Fences & Gates

PART 1 - GENERAL

1.1 - SYSTEM DESCRIPTION:

- A. BOUNDARY Fence System:** individual BOUNDARY fence and hardware components that when properly matched together, create an economical fence system that can be used as a humane and effective deer and elk control or as a simple fence to enclose property lines or denote perimeters.
- B. BOUNDARY Lightweight Deer Fence & Fence Kit:** A lightweight, small mesh (3/4" x 5/8") fence that is economical and versatile. Designed for use where deer traffic is light and seasonal (not for year-round use). The **Fence Kit** adds 10 - 8' telescoping poles, 50 self-locking fence ties and 20 sod staples to a single 7' x 100' section of Lightweight Deer Fence. Designed for use where deer traffic is light and seasonal. Store during off-season months. Use to protect or enclose areas up to 700 ft² such as gardens, landscaping, designed water features, ponds, etc.

- C. BOUNDARY Standard Strength Fence:** Standard weight fence mixes a tough strand with a larger mesh (1-3/4" x 2") to make a tough yet discreet fence. For use as a seasonal **Deer Fence**, use the 7.5 foot high fencing where deer traffic is light to moderate. Store fence in off-season months. For use as a **Perimeter Fence**, use the 4 or 6 foot high fence sizes. While not high enough to deter deer, these sizes are deal for temporary perimeter or property fences. Up to 5 year life expectancy.
- D. BOUNDARY Xtra Tall Fence:** Uses a lighter strand with a 1-3/4" x 2" mesh size. Extends the total fence height to either 10 or 15 feet. As a seasonal **Deer Fence**, use where deer traffic is light to moderate. Use to stop deer from jumping fence in a down-slope application where deer may be up-hill from the fence line. Both the 10' and 15' high fences can be used as perimeter fence as well. NOTE: longer posts will be required to install the Extra Tall BOUNDARY fence. Up to 5 year life expectancy.
- E. BOUNDARY Xtra Strength Fence:** Robust strands and a 1-3/4" x 2" mesh size make for a long lasting and versatile fence. For year round **Deer Fence** applications, use the 7.5 foot high fence. Use where deer traffic is moderate to heavy and consistent year round. Can be stored in off-season if required. For use as a **Perimeter Fence**, use the 5 foot or the 7.5 foot high fences. Up to 15 year life expectancy.
- F. BOUNDARY Max Strength Fence:** Heavy construction and 1-3/4" x 2" knotless mesh size make the Max Strength Fence perfect for long lasting deer & perimeter fence. For year round **Deer Fence** applications, use the 8 foot high fencing. It can be stored in off-season if required. For use as a **Perimeter Fence** use either the 5 foot or the 8 foot high fences. Up to 20 year life expectancy.
- G. BOUNDARY UltraMax Strength Fence:** Heaviest construction of the BOUNDARY Fence grades. Has a 1" x 1-1/2" knotless mesh size make the UltraMax Strength Fence the strongest and longest lasting deer & perimeter fence. For year round **Deer Fence** applications, use the 8 and 13 foot high fencing. It can be stored in off-season if required. For use as a **Perimeter Fence** use the 6, 8 or 13 foot high fences. Up to 25 year life expectancy.
- H. EZ-Set Angle Posts:** 2 piece steel angle iron posts that assembles to provide an 8 foot (2.4 m) high steel post to which the 7.5 and 8 foot high BOUNDARY Fence can be fastened. The 4 foot (1.2 m) ground post is driven into the ground 2 feet (0.6 m). The 8 foot (2.4 m) top post is bolted to the ground post using the supplied hardware. Space the posts along the path of the fence. Ideal spacing is 10 to 15 feet (3 to 4.5 m) apart with 20 feet (6 m) being the maximum distance between posts. Fasten the BOUNDARY Fencing to the posts with Net Ties (#Net Tie 7.5) every 12 inches (30.5 cm) or less along the height of each post.
- I. Premium Steel Posts:** 9 foot (2.7 m) long, 1-5/8" round steel tube post with rain cap and Ground Sleeve. The Ground Sleeve is driven into the ground with the Ground Sleeve Driver until the top of the sleeve is flush with the ground. The post is set into the sleeve, creating an 8 foot (2.4 m) high post to which the BOUNDARY Fence can be fastened. Space the posts along the path of the fence. Ideal spacing is 10 to 15 feet (3 to 4.5 m) apart with 20 feet (6 m) being the maximum distance between posts. Fasten the BOUNDARY Fencing to the posts with the Net Ties every 12 inches (30.5 cm) or less along the height of each post.
- J. Ground Stakes:** installed every 3 feet (about 1 meter apart) or less along the bottom edge of the fence. For deer barrier applications, this keeps deer from 'nosing under' the installed fence. Fence installations over uneven terrain may require additional Ground Stakes to secure the bottom of the fence line.

- K. Ground Anchor:** Long screw style earth anchors used to create anchorages to which the individual fence posts can be fastened. Use to strengthen or steady post mounting at corners, at the end of long fence runs or in poor soil conditions.
- L. Post Driver:** HD steel slide post driver. Quickly sets the 4 foot section of the EZ-Set angle posts. No overhead post driving.
- M. Ground Sleeve Driver:** Heavy duty steel plug that fits into the open end of the Ground Sleeve (Ground Sleeve is supplied with each Premium Steel Post assembly). Allows use of sledge hammer without damaging the edges of the Ground Sleeve. As with all ground penetrating anchorages, use a pilot hole to help
- N. Net Ties:** HD mil-spec poly based cable ties used to fasten the fence to both types of fence posts (EZ-Set and Premium Post) and to anything else that will help support the BOUNDARY Fencing.
- O. Repeller Ribbon:** **Vital** flagging material for the first few weeks of the any deer fence installation. All new deer fence installations **REQUIRE** flagging for the first weeks or months. Fasten individual 2 foot (61 cm) long strips every 10 feet (3 m) or less along the length of the BOUNDARY Fence installation. Make sure each ribbon is fastened at least 4 feet (1.2 m) up from the ground.

1.2 - QUALITY ASSURANCE

- A.** Installer to obtain, review and understand all of Nixalite of America Inc's brochures and instructional literature for the BOUNDARY Fencing.
- B.** Installer must be completely familiar with the proper installation procedures for the BOUNDARY Fence and the specified fence hardware systems.
- C.** Installer must obtain and record **accurate and complete dimensions** that define the areas specified for enclosure by the BOUNDARY Fence. Accurate dimensions drive the fence and fence hardware quantities. Accurate dimensions ensure accurate quotations and material orders.
- D.** Installer should contact manufacturer for any updated or newly developed planning or procedural information that may be pertinent to the BOUNDARY Fence installation.
- E.** Installer to ensure that specified fencing (BOUNDARY Fence) is **Made in the USA**.

1.3 - SUBMITTALS

- A.** Manufacturer's literature including BOUNDARY Fence brochures and specifications. All guides for installing the specified fencing and fence hardware.
- B.** Sample of the specified grade of BOUNDARY Fence. Sample to be not less than 4 inches square (10 cm²).
- C.** Contractor to complete their own estimate worksheet detailing the scope of the fence enclosure and the fence hardware type, location and spacing.

1.4 – STORAGE & HANDLING

- A. Provide storage to keep all BOUNDARY Fence items dry, clean and undamaged. Do not stack or place other packaging or objects on the fencing or fence hardware items.
- B. Keep the BOUNDARY Fence and fence hardware in the original packaging until needed for installation.

PART 2 - PRODUCTS

2.1 – ACCEPTABLE MANUFACTURER

- A. Nixalite of America Inc
1025 16th Avenue, PO Box 727, Dept. N, East Moline, Illinois 61244; U.S.A.
P: 800.624.1189 or 309.755.8771 - F: 800.624.1196 or 309.755.0077
E: birdcontrol@nixalite.com or planning@nixalite.com
www.nixalite.com
- B. ABC Advanced Bird Control – A division of Nixalite of America Inc.
PO Box 727, Dept. N, East Moline, Illinois 61244, U.S.A.
P: 888.212.8682 or 309.755.4708 - F: 309.755.1865
E: info@abcbirdcontrol.com
www.abcbirdcontrol.com

2.2 – BOUNDARY FENCE & FENCE HARDWARE SYSTEM

- A. **BOUNDARY Fence System:** Individual BOUNDARY fence and hardware components that when properly matched together, create an economical fence system that can be used as a humane and effective deer deterrent or as a simple fence to denote property lines and/or perimeters.
- B. **All BOUNDARY Fencing is Made in the USA.**
- C. **All BOUNDARY Fence** is made from UV resistant, extruded black polypropylene.
Melting point (approximately) : 320° F.(160° C.)
Flash point (approximately) : 625° F.(330° C.)
Remains flexible at very low temperatures. Polypropylene is an inert compound and resistant to a wide range of chemicals.
- D. **BOUNDARY Lightweight Deer Fence & Fence Kit:** A lightweight, small mesh (3/4" x 5/8") fence that is economical and versatile. Designed for use where deer traffic is light and seasonal (not for year-round use). **BOUNDARY Fence Kit** adds 10 - 8' telescoping poles, 50 self-locking fence ties and 20 sod staples to a single 7' x 100' section of Lightweight Deer Fence. Use where deer traffic is light and seasonal. Store during off-season months. Use to enclose areas up to 700 square feet (65 m²).
Fence Height: 7 feet (2.1 m)
Roll Length: 100 feet (30.5 m) sections
Mesh Size: 3/4" x 5/8" (1.9 x 1.6 cm) mesh
Mesh Strength: 240 pounds per foot of fence (3.5 Kn/m) tensile strength
Construction: Extruded polypropylene.

- E. BOUNDARY Standard Strength Fence:** Standard weight construction fence with a larger mesh (1-3/4" x 2") for a tough yet discreet fence. For **Deer Fence** applications use the 7.5 foot (2.3 m) high fencing where deer traffic is light to moderate. Store fence in off-season months. For **Perimeter Fence** applications use the 4, 6 or the 7.5 foot high (1.2, 1.8 or 2.3 m) fencing.
Fence Heights: 7.5 feet (2.3 m), 6 feet (1.8 m) and 4 feet (1.2 m)
Roll Lengths: 100 feet (30.5 m) and 330 feet (100.5 m) long rolls
Mesh Size: 1-3/4" x 2" (4.5 x 5 cm) mesh
Mesh Strength: 377 pounds per foot of fence (5.5 Kn/m) tensile strength
Life Span: Up to 5 year life expectancy
Construction: Extruded polypropylene.
- F. BOUNDARY Xtra Tall Fence:** Lighter construction with a large mesh size (1-3/4" x 2"). Both the 10 and 15 foot high (3 and 4.5 m) fence can be used for deer fencing and perimeter fence. For **Deer Fence** applications, use where deer traffic is light to moderate. Store fence in off-season months. NOTE: non-stock length posts are required for installation.
Fence Heights: 10 feet (3 m), 15 feet (4.5 m)
Roll Lengths: 330 feet (100.5 m) long rolls
Mesh Size: 1-3/4" x 2" (4.5 x 5 cm) mesh
Mesh Strength: 308 pounds per foot of fence (4.5 Kn/m) tensile strength
Life Span: Up to 5 year life expectancy
Construction: Extruded polypropylene.
- G. BOUNDARY Xtra Strength Fence:** Robust construction with large mesh size (1-3/4" x 2"). For year round **Deer Fence** applications, use the 7.5 foot (2.3 m) high fence. Use where deer traffic is moderate to heavy and consistent year round. For **Perimeter Fence**, use either the 5 or 7.5 foot (1.5 or 2.3 m) high fencing.
Fence Heights: 7.5 feet (2.3 m), 5 feet (1.5 m)
Roll Lengths: 100, 164, 200 and 330 feet (30.5, 50, 61 and 100.5 m) long rolls
Mesh Size: 1-3/4" x 2" (4.5 x 5 cm) mesh
Mesh Strength: 548 pounds per foot of fence (8 Kn/m) tensile strength
Life Span: Up to 15 year life expectancy
Construction: Extruded polypropylene.
- H. BOUNDARY Max Strength Fence:** Heavy construction with large mesh size (1-3/4" x 2"). For long term **Deer Fence** applications, use the 8 foot (2.4 m) high fence. Use where deer traffic is moderate to heavy and consistent year round. For **Perimeter Fence**, use either the 5 or 8 foot (1.5 or 2.4 m) high fencing.
Fence Heights: 8 feet (2.4 m), 5 feet (1.5 m)
Roll Lengths: 100 and 165 feet (30.5, 50.0 m) long rolls
Mesh Size: 1-3/4" x 2" (4.5 x 5 cm) mesh
Mesh Strength: 890.5 pounds per foot of fence (13 Kn/m) tensile strength
Life Span: Up to 20 year life expectancy
Construction: Extruded polypropylene.

- I. **BOUNDARY UltraMax Strength Fence:** Heaviest construction with large mesh size (1-3/4" x 2"). For long term **Deer Fence** applications, use the 8 and 13 foot (2.4 and 3.9 m) high fence. Use where deer traffic is moderate to heavy and consistent year round. For **Perimeter Fence**, use the 6, 8 or 13 foot (1.8, 2.4 or 3.9 m) high fencing.

Fence Heights: 6 feet (1.8 m), 8 feet (2.4 m), 13 feet (3.9 m)

Roll Lengths: 6 x 100 and 8 x 100 and 13 x 328 feet (30.5, 100.0 m) long rolls

Mesh Size: 1" x 1-1/2" (2.5 x 3.8 cm) mesh

Mesh Strength: 1,405 pounds per foot of fence (20.5 Kn/m) tensile strength

Life Span: Up to 25 year life expectancy

Construction: Extruded polypropylene.

2.3 BOUNDARY FENCE HARDWARE

A. EZ-Set Post Kits

AP8/Top Posts: 1-1/4" x 1-1/4" x 8ft (3.2 x 3.2 x 244 cm) long steel angle, black coated with 5/16" holes every 2" (0.8 x 5 cm) center to center

AP4/Ground Posts: 1-1/4" x 1-1/4" x 4ft (3.2 x 3.2 x 122 cm) long steel angle, black coated with 5/16" holes 2" (0.8 x 5 cm) center to center. Fastening hardware included with Ground Post (2 bolts, nuts & washers)

B. Premium Post Kits

Premium Post: 9ft long x 1-5/8" OD (2.7 m long X 4.13 cm OD) steel post, black painted with cap

Ground Sleeve: 30" (76.2 cm) long galvanized steel ground post with 1-5/8" ID (4.13 cm).

C. **Ground Stake:** 12" (30.5 cm) long galvanized steel ground stakes hold fencing to ground.

D. **Ground Anchor:** HD steel screw-in ground anchor used to reinforce corner posts (requires additional cable hardware items).

E. **Ground Sleeve Driver:** HD steel plug that fits into the open end of the Ground Sleeves. Allows use of sledge hammer without damaging the Ground Sleeve.

F. **Post Driver:** HD steel slide post driver. Quickly drives the EZ-Set Ground Post into the ground. Protects the post and your fingers.

G. **Net Tie 7.5:** 7-1/2" (19 cm) long UV resistant cable ties to fasten fencing to posts and objects.

H. **Post Driver:** HD post driver to drive EZ-Set Ground posts into the ground.

I. **Repeller Ribbon:** Available in 25 foot (7.6 m) and 100 foot (30.5 m) long rolls. Vital flagging material for the first few weeks or months of the Deer Blocker installation. All new fence installations REQUIRE flagging for the first weeks or months.

PART 3 - EXECUTION

3.1 - INSPECTION

- A. Visually inspect the areas to receive the BOUNDARY Fence System. Remove any loose debris and moveable objects out of the path of the BOUNDARY Fence System.

- B. Inspect and note the makeup of the ground. Avoid hard rock outcrops, gravel or other materials that will not readily accept the specified fence posts or ground sleeves. You may have to move post locations to accommodate these conditions.
- C. Notify architect of detrimental conditions. Do not proceed until these conditions have been corrected.

3.2 - PREPARATION

- A. Verify the running length of the fence path. Use the BOUNDARY Fence brochures and Installation Guidelines to make sure you have sufficient quantity of BOUNDARY Fence and Fence Hardware to effectively enclose the specified areas.
- B. Verify the position/location of any trees, posts and structures that can be used for additional support along the proposed path of the BOUNDARY Fence enclosure. The use of existing objects can help reduce the number of fence posts required.
- C. Level out small depressions and rises along the path of the BOUNDARY Fence enclosure. Smoothing out the grade can help stop deer from getting under the installed fence after installation. If spanning large depressions or holes, use additional BOUNDARY Fence or other blocking in the depression to keep deer from getting under or around the enclosure.

3.3 - INSTALLATION

- A. Install the BOUNDARY Fence system as specified or shown on the project plans.
- B. Along flat fence runs, the BOUNDARY Fence must be supported every 10 to 20 feet (3 to 6 meters) along the pre-determined path of the enclosure. Do not exceed 20 feet (6 meters) between supports or fence posts. 10 to 15 feet (3 to 4.5 m) is ideal spacing. Along with the BOUNDARY fence posts, you can use any natural or existing supports available (trees, poles, posts, buildings, etc.). If installing on uneven ground, it may be necessary to add more support posts to keep fencing tight.
- C. Keep the BOUNDARY Fence tight for the entire run. Pull fencing tight before fastening to each post or support. Do not allow wrinkles or gaps in the fence enclosure.
- D. If using the EZ-Set Angle Posts, follow the instructions provided by the manufacturer for installing these posts at the specified spacing. Fasten the BOUNDARY Fence to the posts every 12 inches (30.4 cm) along the height of the post starting at the top.
- E. If using the Premium Posts, follow the instructions provided by the manufacturer for installing these posts at the specified spacing. Fasten the BOUNDARY Fence to the posts every 12 inches (30.4 cm) along the height of the post starting at the top.
- F. If using an existing tree, pole or structure, fasten the BOUNDARY Fence to the object every 12 inches (30.4 cm) starting at the top of the installed fence.
- G. Stake the bottom border of the BOUNDARY Fence to the ground every 3 feet (0.9 m) or less along the entire length of the enclosure. For deer fence installations, this helps prevent deer from 'nosing under' the fence. It also helps keep the fence tight and uniform in appearance.

H. FLAGGING IS VITAL FOR DEER FENCE APPLICATIONS

For at least the first 3 months of the installation, attach 2 foot (60 cm) long strips of the Repeller Ribbon (holographic Mylar ribbon markers) to the fencing. Space them every 10 feet (3 meters) along the path of the fence, 4 feet (1.2 meters) up from the ground. This is a temporary measure that helps prevent deer to fence collisions that might occur with the sudden appearance of the BOUNDARY Fence barrier. The large 1-3/4" x 2" mesh is inconspicuous – especially at night. Flagging with the ribbon helps define the extent of the enclosure.

3.4 – ADJUSTMENTS / CLEANING

- A. The BOUNDARY Fence System is an active deer barrier and area enclosure. It will require regularly scheduled inspections and if needed, maintenance to repair any damage done.
- B. A regularly scheduled inspection of the installed BOUNDARY Fence system is highly recommended. The installed fence can be damaged or degraded by falling trees and tree limbs, windblown debris, brush fires, vandalism, etc. Remove all debris and obstructions and repair any damage done the the enclosure.

Nixalite of America Inc – 1025 16th Avenue – East Moline, IL. 61244
Ph:800.624.1189 Fax:800.624.1196 Email: birdcontrol@nixalite.com
Website: www.nixalite.com

Copyright 2016 – Nixalite[®] of America Inc
Nixalite[®] is a registered trademark of Nixalite[®] of America Inc
Printed with pride in the USA.