Three-Part Specifications - Copyright 2025 - Nixalite® of America Inc

Redbird Fire Retardant Bird Netting & Hardware

Includes specifications for: Redbird Fire Retardant Bird Netting and the Tensioned Perimeter & Support Cable System.

Nixalite's exclusive **Redbird Fire Retardant Bird Exclusion Netting** is a flame retardant bird exclusion netting with a ³/₄" (19 mm) square mesh to keep out most pest bird species. Use Redbird Fire Retardant Bird Netting for projects requiring fire retardant products that meet NFPA 701 standards.

Redbird Fire Retardant Bird Netting is made of treated high density polyethylene (HDPE) mesh. Each 6-ply strand has 5 black and one red filament (giving the netting its reddish hue) with 48 pound (22 kg) knotted breaking strength. All pieces are seamless and borderless for clean edges and easier edge fastening. A tensioned support cable system is often used to install the Redbird Flame Retardant Netting.

Nixalite Redbird Bird Exclusion Netting CSI locations;

Master Format 2004 – 10 81 00 - Pest Control Devices Master Format 2004 – 10 81 13 – Bird Control Devices

PART 1 - GENERAL

1.1 - SYSTEM DESCRIPTION:

- A. **Redbird Fire Retardant Bird Netting** is a high-density polyethylene (HDPE) netting that is treated with a fire-retardant additive and complies with NFPA 701 Standard Methods of Fire Tests. Stops birds with a ¾" (19 mm) square mesh.
- B. **Bird Netting Hardware** fastens bird netting to all types of surface shapes and materials. A variety of netting installation tools and accessories are available.
- C. **Surface Cleaning System**: surface disinfectants and deodorizers to neutralize potentially hazardous bird and/or animal wastes and properly prepare the surface for installation.

1.2 - QUALITY ASSURANCE

- A. Obtain all of Nixalite of America Inc.'s planning guidelines for the Redbird Fire Retardant Bird Netting. Installer to be familiar with the recommended installation procedures for the specified netting and the specified mounting system.
- B. Obtain accurate and complete dimensions for bird netting enclosure. Accurate dimensions drive bird netting and hardware quantities and ensure accurate quotations and orders.
- C. Contractor to provide the **Nixalite Certificate of Authenticity** issued by Nixalite of America Inc after ordering the Redbird Fire Retardant Bird Netting. This provides information that will be required to receive project close out documentation.
- D. Installer to ensure that bird netting meets or exceeds NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2015.

1.3 - SUBMITTALS

- A. Manufacturer's literature including Redbird Fire Retardant Bird Exclusion Netting brochures and installation guidelines. All guides for installing the specified bird netting hardware system and the specified surface cleaning system.
- B. Sample of the Redbird Fire Retardant Bird Exclusion Netting. Not less than 4" square (10.16 cm)

1.4 - STORAGE & HANDLING

- A. Provide storage to keep all Redbird Fire Retardant Bird Exclusion Netting boxes dry, clean and undamaged.
- B. Keep the Redbird Fire Retardant Bird Exclusion Netting in original packaging until needed for installation.

PART 2 - PRODUCTS

2.1 - ACCEPTABLE MANUFACTURER

A. Nixalite® of America Inc

1025 16th Avenue, East Moline, Illinois 61244; U.S.A.

P: 309.755.8771 - E: planning@nixalite.com or sales@nixalite.com www.nixalite.com

B. ABC Advanced Bird Control – A division of Nixalite® of America Inc.

PO Box 727, East Moline, Illinois 61244, U.S.A.

P: 309.755.4708 E: info@abcbirdcontrol.com www.abcbirdcontrol.com

2.2 - BIRD-NET BIRD EXCLUSION NETTING

- A. **Material:** High density polyethylene (HDPE) that is abrasion, UV and rot resistant. Netting to meet NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2015.
- B. Colors: Black with red indicator filament.
- C. **Construction**: Knotted square mesh netting. ³/₄" (19 mm) square mesh. Redbird has a 48 lb. (21 kg) knotted breaking strength. All pieces are seamless and borderless for clean edges and easier perimeter fastening.
- D. Standards: Bird-Net must meet or exceed ISO 1806 Mesh Strength Standards.
- E. **Standards:** Must meet or exceed NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2015
- F. Mesh size & Applications:

3/4" (19 mm) square mesh for most pest birds.

G. Netting Sizes:

Widths: 25' (7.6m) and 50' (15.2m).

Lengths: 100' (30.4m).

H. Warranties:

Redbird Fire Retardant Netting has a 10-year limited warranty.

I. Thermal & Physical Properties:

Melting point: 250 F° (145 °C)+.

Meets NFPA 701 Standard Methods of Fire Tests

Remains flexible at very low temperatures. Specific gravity: 0.96 – will not absorb water.

Chemically inert. Resistant to acids and alkalis at room temperature.

2.3 BIRD NETTING HARDWARE

- A. Installer to contact manufacturer for up-to-date information for bird netting hardware.
- B. Tensioned Perimeter and Support Cable Hardware System:
 Choose the Connection, Corner, Cable Guide and Finishing hardware that best suits the installation surface.
- C. Net Cable & Connection Hardware:
 - a) Net Cable: Aircraft grade, all stainless steel, 7 x 7 (49 strand), 3/32" (2.2 mm) diameter cable with 900 lb. (407 kg) breaking strength. Net Cable comes in 250' (76.2 m) and 500' (152.4 m) spools.

- b) **Turnbuckles:** Stainless steel, hook & eye turnbuckles. The size of the turnbuckle is determined by the maximum continuous cable length of any one cable run. For one **Small Turnbuckle** the max continuous cable length is 25 ft. (7.6 m). For one **Medium Turnbuckle** the max continuous cable length: 50 ft. (15.2 m). For one **Large Turnbuckle** the max continuous cable length: 75 ft. (22.9 m).
- c) **Net Ferrules:** Zinc plated copper crush ferrules for 3/32" (2.2 mm) dia. cable. Use when the max continuous cable length is 25 ft. (7.6 m) **OR LESS**. Use at least 2 ferrules per cable loop connection. Use Nixalite's Cable Swaging Tool to install ferrules. Use a Thimble with Net Ferrules.
- d) **Wire Rope Clamps**: Galvanized or stainless-steel wire rope clamps for 3/32" (2.2 mm) diameter cable. Use for loop connections on cable runs of 25' (7.6 m) or more. Use 2 or more clamps per cable loop connection. Use a Thimble with wire rope clamps.
- e) **Cable Thimble:** Stainless steel cable Thimble for 3/32" (2.2 mm) diameter cable. The Thimble prevents cable fraying and creasing when creating loop connections. Use one Thimble per loop connection.

D. Corner Hardware (Anchoring):

- a) **Eyebolts:** HD stainless steel eyebolts used in steel and masonry surfaces. Two sizes: 1" (25.4 mm) threaded stem and 2" (51 mm) threaded stem for thicker surfaces. 9/16" ID (14.3 mm) eyelet for both sizes. Maximum distance between eyebolts: 50' (15.2 m). **For Steel:** If steel is open, drill clearance hole for stem, install eyebolt and use ½ 20 NC hex nut to secure. If back of steel is not accessible, drill then tap the hole for ½ 20 NC thread. Apply thread locker on eyebolt threads. Install the eyebolt. **For Masonry:** Use the HD stainless eyebolt with 1" threaded stem with the Masonry Machine Screw Anchors. Drill the recommended hole size for the anchors, insert and set the anchors and thread the eyebolt into the anchor.
- b) **Screw Eyes:** Use as corner hardware in wood and wood core surfaces. HD stainless steel screw eyes 2" (51 mm) long, 17/32" I.D. (13.5 mm). Pilot holes recommended. Maximum spacing between screw eyes: 50' (15.2 m).
- c) **Machine Screw Anchor:** Zinc plated anchor 1/2" (12.7 mm) diameter x 1" (25.4 mm) deep with 1/4-20 threads inside. Setting tool included with anchors.

E. Cable Guide Hardware:

- a) **Small Screw Eyes:** Use to keep cable close to the installation surface. Use on wood, sheet metal and wood core surfaces. Stainless steel, 1-3/16" long x 7/32" I.D. (31 mm long x 5.3 mm I.D.). Max spacing: 24" (61 cm) O.C. Pilot holes recommended.
- b) **Small Eyebolts:** Use to keep cable close to the installation surface. For steel, thick sheet metal and masonry surfaces. Heavy duty, stainless steel, 1 3/8" long x 9/32" I.D. (35 mm long x 7.1 mm I.D.) with stainless hex nut. Max spacing: 24" (61 cm) O.C. **To fasten to Steel:** If steel is open, drill clearance hole and install eyebolt and use 10 24 NC hex nut to secure. If back of steel is not accessible, drill then tap the hole for 10-24 NC thread and install the eyebolt. **To fasten to Masonry:** Use the small stainless-steel eyebolts and the small Machine Screw Anchors. Drill the recommended hole size for the anchors, insert and set the anchors and thread the eyebolt into the anchor
- c) **Sidewinders For Steel:** Self drilling and self-tapping cable guides for heavy steel up to ½" (12.7 mm) Maximum spacing: 24" (61 cm). Install installed with the Sammy Socket accessory.
- d) **Sidewinders For Concrete:** For use in solid block or slab concrete. Requires ¼" (6.35 mm) diameter and 2" (50.8 mm) deep drilled holes. Install the Sidewinder Sammy Socket Driver.

- e) **E-Z Clip:** Keeps cable tight to the installation surface. Stainless steel bracket used on all types of installation surfaces. E-Z Clip 1/8" (3.7 mm) mounting holes for fasteners (not supplied).
- f) **Hammer-On Flange Clips:** Available in black oxide coated steel or stainless steel. Hammer-On Flange Clips routes the Net Cable parallel to the outer edges of beams or other structural steel flanges. Contact Nixalite for installation guidelines.
- g) **Stainless Steel Angle Bracket:** A stainless-steel angle bracket with two (2) holes one for mounting the other for the cable. Fasten with the appropriate fastener (not supplied.
- h) **Stainless Steel J-Clamp:** A J-shaped strap of stainless steel with mounting and cable guide holes. Fasten with the appropriate fastener (not supplied.

F. Finishing Hardware:

- a) Net Rings: Two types of stainless steel net rings to attach the netting mesh to the cables, to join two pieces of netting and to fasten the Net Zippers to the netting. Net ring quantity requirements per attachment:
 - Netting to Cable: 16 net rings per foot (each netting mesh).
 - **Lapped Seams**: 32 net rings per foot (1 ring per mesh on each side of seam). **Net Zipper Installation**: 32 net rings per foot (1 ring per mesh on each side of zipper).
- b) **Net Zipper:** Allows for access to areas behind the bird netting installation. Available in both black and tan and in 2 ft. (61 cm), 4 ft. (122 cm), 6 ft. (183 cm) and 8 ft. (244 cm) lengths. Heavy duty, marine-grade, Net Zipper with 3/4" (1.9 cm) heavy fabric tape, one fixed end and open top with auto lock slider.

2.4 - SURFACE SANITIZING & DEODORIZING

- A. Nixalite of America Inc offers several different broad spectrum surface sanitizers and deodorizers to help protect your people from the hazards of pest bird waste. Contact Nixalite for recommendations on the proper sanitizing product for your application.
- B. **Safety Equipment:** Nixalite offers personal protection equipment (PPE) to protect personnel from the hazards related to pest bird and animal waste materials. Contact Nixalite for details.

PART 3 - EXECUTION

3.1 - INSPECTION

- A. Visually inspect the surfaces that will receive the netting hardware and all areas that will end up behind or inside the netting installation. Note damaged surfaces or incomplete construction that could compromise the bird netting installation.
- B. Note all areas, surfaces or objects that may require maintenance or periodic replacement after the bird netting is installed (i.e. lights, electrical equipment, etc.). Use the appropriate netting accessories to allow access behind the installed netting system.
- C. Note any objects or conditions that could damage the installed bird netting. Install the Bird-Net in such a manner as to avoid these conditions.

3.2 - PREPARATION

- A. Verify the dimensions for each area specified for enclosure with the Redbird Fire Retardant Bird Exclusion Netting. Use manufacturers Planning Guides to verify that sufficient bird netting and net hardware will be installed at each location specified for bird netting.
- B. Make sure all installation surface finishing requirements have been accomplished before installing the Redbird Fire Retardant Bird Exclusion Netting. Netting is to be the last item installed on each specified surface. Do not apply any surface coating or treatment (paint,

sealer, etc.) over or on the installed Redbird Fire Retardant Bird Exclusion Netting or the mounting hardware.

3.3 - SURFACE CLEANING

A. All surfaces to be clean, dry and free of obstructions before the Redbird Fire Retardant Bird Exclusion Netting is installed.

B. If Bird Waste Is Present:

- Treat, neutralize and safely remove all bird waste from installation surfaces. Installer must follow all municipal, state and federal regulations regarding the proper removal and disposal of bird droppings and waste materials such as nests and dead birds.
- C. Use Nixalite's surface cleaning products to neutralize any bird droppings, nests and related waste materials that may be present. Strictly follow treatment instructions provided with Nixalite's surface cleaning products.
- D. Use Nixalite cleaning products to help prevent disease transmittal when working around surfaces contaminated with bird droppings.

3.4 - INSTALLATION

- A. Install the bird netting as recommended by manufacturer. If necessary, cut the net to fit the area. If multiple pieces are needed, join the pieces together with the recommended joining hardware.
- B. Install Redbird Fire Retardant Bird Exclusion Netting to avoid contact with machinery, vehicles, extreme heat, tree branches, etc. Make necessary adjustments to keep netting a sufficient distance from these objects or conditions.
- C. Finished bird netting installation to be taught, free of wrinkles, gaps and openings.

3.5 - ADJUSTMENTS / CLEANING

- A. Remove installation debris and waste from project site. Inspect finished installation. Make any adjustments needed to conform to installation guidelines.
- B. Redbird Fire Retardant Bird Exclusion Netting is a physical and passive barrier. It relies on optimal placement and proper installation. Exclusion netting must block off or seal up all routes and paths that pest birds follow to their preferred roosts.
- C. Note any holes, gaps or openings in the bird net installation that birds can use to bypass or get around the netting barrier. Correct these conditions immediately.

3.6 - POST INSTALL

- A. Contractor to provide the **Nixalite Certificate of Authenticity** issued by Nixalite of America Inc after ordering the Redbird Fire Retardant Bird Exclusion Netting. This provides information that will be required to receive project close out documentation.
- B. Contractor to provide any manufacturer post installation maintenance documentation for the Redbird Fire Retardant Bird Exclusion Netting and tensioned cable system.

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