

SECTION 108113 – BIRD CONTROL

PART 1 - GENERAL

1.1 SYSTEM DESCRIPTION

- A. Bird Netting will be Nixalite Bird-Net Bird Netting (or engineer approved equivalent) and will be constructed of black, UV resistant high-density polyethylene.
- B. Bird Netting Hardware fastens the bird netting to all types of surface shapes and materials.

1.2 QUALITY ASSURANCE

- A. Installer must obtain, review and understand all manufacturers' installation guidelines.
- B. Installer must be completely familiar with the proper installation procedures for the bird netting and hardware.
- C. Installer should contact manufacturer for any updated or newly developed planning or procedural information that may be pertinent to the bird netting installation.
- D. Installer to ensure that bird netting meets or exceeds ISO 9001 2000 Quality Management Standards.

1.3 SUBMITTALS

- A. Manufacturer's literature including specifications and installation guidelines for the bird netting and hardware and surface cleaning system
- B. Sample of the bird netting, in black or stone - not less than 6" square.
- C. Contractor to complete estimate worksheet detailing the scope of the netting enclosure, and the mounting hardware type, location and spacing.

1.4 STORAGE AND HANDLING

- A. Provide storage to keep all netting and netting hardware shipping boxes dry, clean and undamaged. Do not stack or place other packaging or objects on the bird netting shipping boxes.
- B. Keep bird netting, installation hardware and surface cleaning systems in original packaging until needed for installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Nixalite of America Inc.
1025 16th Avenue, P.O. Box 727, Dept. NI, East Moline, Illinois 61244; U.S.A.
Phone: 800.624.1189 or 309.755.8771 - Fax: 800.624.1196 or 309.755.0077
E-mail: birdcontrol@nixalite.com or planning@nixalite.com Web: www.nixalite.com.
- B. ABC Advanced Bird Control — A division of Nixalite of America, Inc.
PO Box 727, Dept. NI, East Moline, Illinois 61244, U.S.A.
Ph: 888.212.8682 or 309.755.4708 — Fax: 309.755. 1865
E-mail: info@abcbirdcontrol.com Web: www.abcbirdcontrol.com
- C. Architect approved equivalent.

2.2 BIRD NETTING

- A. High Density Polyethylene (HDPE) that is abrasion, UV, flame and rot resistant. Netting to be waterproof.
- B. Construction: Knotted square mesh netting.
- C. Mesh sizes: 3/4" (19 mm).
- D. Sizes: Width — 100 feet (30.4m), Lengths - 100 feet (30.4m).
- E. Physical Properties: Strength — 46 lbs (21kg) knotted breaking strength.
- F. Thermal Properties: Melting point: 250+ degrees F. Remains flexible at very low temperatures. An inert compound and resistant acids and alkalis.

2.3 BIRD NETTING HARDWARE

- A. Tensioned Cable Hardware: Cable hardware is NOT FOR LOAD LIFTING!
 - 1. Connection hardware:
 - a. Net Cable: Aircraft grade, 302/304 stainless steel, 7x7, 49 strand, 5/32-inch diameter cable with 43 lbs breaking strength in minimum of 1000 foot spool lengths.
 - b. Turnbuckles: Stainless steel, hook & eye turnbuckles, 3/8-inch x 6 inches with a safe working load of 1000 lbs. Max cable run: 230 feet.
 - c. Wire Rope Clamps: Galvanized or stainless steel for 5/32-inch diameter cable. Always use a minimum of 2 clamps per connection. Always use in conjunction with Cable Thimble.
 - d. Cable Thimble: Heavy-duty stainless-steel cable thimble, Type 316 for 3/16" diameter cable. Cable Thimble prevents cable fraying and creasing when tensioning cable system.
 - e. Steel Forged Eyebolt: 6 inches long, 5/16-inch I.D. with 5/16-18 stainless steel hex nut. Maximum spacing between eyebolts: 20 feet.
 - 2. Finishing Hardware:

- a. Net Rings: Attaches the netting mesh to the cables, and closes seams. Use net rings for the pneumatic ring tool. Net ring quantity requirements per attachment:
Netting to cable: Use 16 net rings per foot (each netting mesh). Lapped seams: Use 32 net rings per foot (1 per mesh each side of seam).

2.4 SURFACE DISINFECTANTS

- A. Steri-Fab: surface disinfectant and bactericide to neutralize bird waste. Do not use with Microcide-SQ on the same surface.
- B. Microcide-SQ: surface cleaner and deodorizer to sanitize surface and remove any residual odor from bird inhabitation. Do not use with Steri-Fab on the same surface.
- C. Microsan: anti-bacterial soap and lotion to prevent disease transmittal after working around surfaces contaminated with bird & animal wastes. Use to compliment personal protection equipment standards (PPE).
- D. All Marine Bird Dropping Remover: a non-toxic, biodegradable bird dropping remover that is safe and effective for use in both marine and land applications. Instantly dissolves bird droppings both wet and dry, in or out of the marine environment.
- E. Stain & Odor Remover: a non-toxic, biodegradable stain and odor remover that uses naturally occurring active to remove the worst types of odors and stains. Safe and effective for both wet and dry environments.

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 netting in such a manner as to avoid these conditions.

3.2 PREPARATION

- A. Netting must be installed prior to filling of pit and access/egress ramps must be installed prior to installation of bird netting.
- B. Field Measurements: Verify dimensions of the areas to be enclosed. Make sure you have sufficient quantity of bird netting, netting hardware and surface cleaning products to properly install the Bird Netting System.

3.3 SURFACE CLEANING

- A. All surfaces to be clean, dry and free of obstructions before bird control is installed.
- B. IF BIRD WASTE IS PRESENT: Treat, neutralize and safely remove all bird waste from installation surfaces. Installer must follow all cities, state and federal regulations regarding the proper removal and disposal of bird droppings.
- C. Use manufacturers' approved surface cleaning products to neutralize any bird droppings, nests and related waste materials that may be present. Allow all surfaces to air dry completely, and then reapply to sanitize and deodorize the surface before proceeding. Strictly follow treatment instructions provided with manufacturers' approved surface cleaning products
- D. Use anti-bacterial personal protection products to help prevent disease transmittal when working around surfaces contaminated with bird droppings.

3.4 INSTALLATION

- A. Install the bird netting hardware as recommended by manufacturer. General order of installation: install perimeter and support hardware; attach bird netting to installed hardware; install access or additional support hardware as specified.
- B. Install Bird netting as recommended by the manufacturer. If necessary cut the Bird netting to fit the area. If multiple pieces are needed, join the pieces together with the recommended seam fastening hardware.
- C. Install Bird 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.
- D. Finished Bird netting installation to be taught, free of wrinkles, gaps and openings.

3.5 ADJUSTMENTS / CLEANING

- A. Remove debris and waste materials from project site.
- B. Inspect finished installation. Make any adjustments needed to conform to manufacturer's Bird netting installation guidelines.

3.6 SNOW / ICE REMOVAL

- A. Snow and ice much be removed if build-up on netting is greater than 0.5 inches. Inspection and removal must occur after storm events where precipitation is greater than 0.5 inches in accumulation.

END OF SECTION 108113